DOCUMENT RESUME

ED 247 037 PS 014 568

AUTHOR	Dawson, Ann Gilman; And Others
TITLE	An Experimental Study of the Effects of Employer-Sponsored Child Care Services on Selected Employee Behaviors.
INSTITUTION	CSR, Inc., Chicago, IL.; Foundation for Human Service Studies, Inc., Chicago, IL.
SPONS AGENCY	Office of Human Development Services (DHHS), Washington, D.C.
PUB DATE	6 Aug 84
GRANT	90-CJ-51/01
NOTE	127p.; For executive summary, see PS 014 569. Produced by the Study of Employer Sponsored Child Care Services.
PUB TYPE	Reports - Research/Technical (143)
EDRS PRICE	MF01/PC06 Plus Postage.
DESCRIPTORS	*Day Care Centers; Early Childhood Education; Employed Parents; *Employee Attitudes; *Employer Supported Day Care; Federal Government; Fringe Benefits; Hospitals; *Information Services; Job Performance; *Labor Turnover; Morale; *Mothers; Public Relations; Questionnaires; Referral; Work Attitudes
IDENTIFIERS	*Absenteeism (Employee); Corporations

ABSTRACT

Described in this report is a study conducted to determine whether different kinds of employer-supported child care services had differing effects on the users of these services. Data were gathered on a year's attendance and turnover rates for 891 female employees who had used employer-provided child care. Subjects were randomly selected from 39 Midwestern and Northeastern companies and hospitals offering no services, on-site or off-site child care, or information and referral services. Results indicated that provision of on-site and off-site child care services by the employer had a positive effect on users' turnover rates; their morale; their perceptions of their job performance; and their decisions to accept and continue employment, to recommend their employer, and to work overtime. Information and referral services did not have as positive an effect as provision of child care. Other issues discussed in the report are the growth of corporate child care services and their limitations, the extent to which a corporation's public image is enhanced by providing day care, and the government's role in promoting information on corporate day care. Eleven appendices include selected employee comments, employer addresses, and study questionnaires and forms. (CB)

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Study of Employer Sponsored Child Care Services

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ED247037

An Experimental Study of the Effects of Employer-Sponsored Child Care Services On Selected Employee Behaviors

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The Department of Health and Human Services
Office of Human Development Services
Under Grant No. 90-CJ-51/01

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August 6, 1984

PS 014568

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Study funded by a grant from the Department of Health and Human Services

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ACKNOWLEDGEMENTS

This study would not have been possible without the participation of many employers and their employees and a number of other persons. We wish to thank all of these organizations and individuals, those that participated anonymously and those wanting to be identified (as listed below). We are specifically grateful for the assistance of the Field Coordinators who were responsible for gathering the data: Jean Kelly, Ann Kuhn, Lynda Markut, Jules Marquart, Cheri Sterman Miller, Wendy Sanders, Laura Hoffman Scherz, and Sharon Sheehan.

We also want to thank the directors that allowed us to field test our questionnaire at their employer-supported child care centers: Jane Grady at Laurance Armour Day School, Mark Podolner at Lakeview Child Care Center and Muriel Tuteur at Amalgamated Child Day Care and Health Center. And finally a very special thanks to our hardworking typist, Angela Taylor Tukes.

The following is the list of employer/participants that wished to be mentioned. Addresses and contact persons for each of them are included in the final section of the report.

Allstate Insurance Company
Bethesda Hospital, Inc.
Carlson Craft
CIGNA Corporation
Empire Airlines Day Care Center
Fairview Hospital
Family Hospital
1st Source Corporation
Globe-Weis/Division of Sheller-Globe Corporation
Ingham Medical Center
The Jewish Hospital of St. Louis at Washington University Medical Center
Lake Forest Hospital
Luther Hospital, Inc.
The Lutheran Hospital of Fort Wayne, Inc.
Mt. Sinai Hospital
NCR Engineering & Manufacturing - Ithaca
Northwestern Bell Telephone Company
Nyloncraft, Inc.
Petersen Health Care of Wisconsin, Inc.
Polaroid Corporation
Saint Mary's Health Center
Union Fidelity Life Insurance Company

EXECUTIVE SUMMARY

The primary purpose of this study was to determine whether different kinds of employer supported child care services had differing effects on the users of those services. The experimental employers were 29 companies and hospitals in the northeastern and midwestern states that had supported one of three kinds of child care service for their employees. Fifteen of the employers were hospitals, nine were manufacturing companies and five were non-manufacturing companies. Of the ten control employers, four were hospitals, two were manufacturing companies and four were non-manufacturing companies.

This was a retroactive study designed to obtain one full year of attendance, turnover and other data on selected employees of each of the following four categories of employers:

On-Site Child Care (n=12): While fees, eligibility requirements and operating responsibilities varied, all employers in this category provided a child care center either in or within one block of the worksite building.

Off-Site Child Care (n=9): Employers in this category supported some kind of off-site child care. These included voucher systems which paid part or all of the costs of employee selected services, vendor programs with local or national day care providers and employer operated day care centers away from the worksite.

Information/Referral (I&R) Services (n=8): Employers in this category either operated an in-house I&R service or contracted with an externally operated I&R service to provide this service for their employees.

No Service (n=10): Employers in this category, the control companies, had never operated a child care service of any kind.

METHODOLOGY

Two groups of employees were randomly selected from each of the 39 employers participating in the study. In the experimental companies one of these was from employees who had used the child care service (users: n=311) and the second from among those who had not (non-users: n=320). In the control companies, one group was selected from those eligible to use a child care service had it been provided (potential users: n=130), and a second group from those who would not have been eligible to use a child care service (non-users: n=130).

Data Collected

Non-aggregated attendance data for one full year were collected from employer personnel files on each selected employee in the experimental and control companies. Using the formula of The Bureau of National Affairs (1983), absenteeism rates were determined by dividing unscheduled days absent by days scheduled to work.

A self-administered questionnaire was distributed to the selected employees who had used the employers' child care service (n=311) to obtain information on demographics of the employees, their families, their child care arrangements, their length of employment, reasons for working, income and job status. Employees were also asked about the effects of the child care service on their acceptance of employment, plans to continue this employment, opportunities for promotion and overtime. They were asked to rank the effect the child care service had on their job performance. One open ended question was included at the end of the questionnaire.

Information on termination of the users of the child care service was obtained from all companies and hospitals providing either on-site or off-site child care services. An annual turnover rate for female users of the service was calculated consistent with the procedures used by The Bureau of National Affairs and compared with rates for all employees. Company turnover rates were obtained from seventeen employers who provided either on-site or off-site child care.

Analysis Plan

Statistical analyses were undergone in order to assess the relative influence of the different types of child care services offered on specific behaviors and attitudes of the employees. Covariate analysis was chosen as the analytic tool for this analysis because of the quasi-experimental nature of the data collection procedures. This technique permits examination of partial relationships, that is, the relationship between two variables when other confounding variables are held constant; and allows greater confidence that a truely causal relationship exists between the independent variable and the dependent variable when a significant correlation is observed.

Type of child care service was the independent variable in all analyses. The four levels of service (on-site child care, off-site child care, information and referral services (I&R), and no service) were measured on an ordinal scale with on-site child care providing the greatest amount of care and no service the least.

Seven dependent variables were investigated. In all cases, the basic question was: "Does type of child care service have an effect on the dependent variable, when the covariates are controlled?" The Absenteeism of the employees using employer supported services was the behavior of interest. The attitudes of interest were the influence of the type of child care on the employee's (1) decision to Accept Employment in her company; (2) decision to Continue Employment in the company; (3) Recommendation of Employer to a prospective employee; (4) Availability to Work Overtime; (5) Acceptance of a Promotion and (6) Perceived Effect on Job Performance.

An additional behavior of interest, Employee Turnover, was computed, and an attitude of interest, Employee Morale, was examined.

FINDINGS:

Absenteeism: Two separate analyses were undertaken to investigate the effects of child care services on the absenteeism of women who used those services: One included all four levels of child care; the second included only three levels (i.e. on-site, off-site, information and referral). The effect of type of child care on absenteeism could not be determined in this analysis. Although there was no significant difference found between the three levels of type of child care in one analysis and the four levels of type of child care in the other, the errors of prediction were large enough to include the possibility that there may be an effect. Thus, given our sample, no conclusions can be drawn as to the relationship between absenteeism and type of child care service.

Accept Employment: It was found that provision of on-site or off-site child care services had a significant influence ($p < .001$) on the subjects' decisions to accept employment. Employees whose employers provide only I&R services were not very likely to state that the child care service had an influence on their acceptance of employment. It is possible to increase the probability that an employee will state that such services influence acceptance of employment by providing more services. Specifically, employees using off-site services and employees using on-site services were approximately 20% and 30% more likely, respectively, to state that the service had an influence on their decisions, than were employees of companies which provided I&R services.

Continue Employment: The partial correlation for this analysis was significant at the .01 level, indicating that the amount of child care services provided does have a positive effect on employees' decisions to continue their present employment. While the pattern here is similar to that of the previous analysis, the magnitude of the changes is considerably less. Off-site company and on-site company employees are only 10% and 16%, respectively, more likely than Information and Referral company employees to state that the company provided services have an influence on their decisions to continue their present employment. Thus, while subjects felt that the provision of the child care services had a positive effect on their decision to continue employment, this influence was not great.

Recommendation of Employer: Employees were more likely to recommend their employers to others when either off-site or on-site child care services were provided by their employer. The relationship between the degree of child care service provided by an employer and employees recommending their employer to others was significant at the .001 level. In this analysis, the responses of employees utilizing off-site services and on-site services did not differ significantly from one another. Both of these groups were approximately 30% more likely than employees using information and referral services to state that they had recommended their employer to others because of the child care services.

Availability to Work Overtime: Employees were more likely to be able to work overtime or odd hour shifts when either off-site child care services or on-site child care services were provided by their employer. The relationship between amounts of child care service provided by an employer and the employee's ability to work overtime was significant at the .001 level. As in the previous analysis, the values for off-site and on-site child care did not differ significantly from each other, and both were larger than the value for the information and referral companies.

Acceptance of a Promotion: A significant relationship was not found between type of child care service and acceptance of a promotion. It should be noted that, as a result of the large number of subjects stating that this item was not applicable, this analysis was based on relatively few subjects per company.

Perceived Effect on Job Performance: The child care service provided by an employer had a positive effect ($p < .001$) on employees' perceptions of their job performance. Employees in companies which provided either on-site or off-site child care services were more likely than those in companies which sponsored I&R services to say that the child care service had a positive effect on the way they did their job. The responses of users of off-site child care and on-site child care did not differ significantly from each other. Users of off-site services were 50% more likely and users of on-site services were 45% more likely than users of I&R services to state that the employer provided services had a positive influence on their job performance.

Employee Turnover: Provision of either on-site or off-site child care services results in greatly reduced turnover rates among users of these services. For sixteen (94%) of the seventeem employers included in the analysis, the annual turnover rate for employees who used the child care service was lower, often substantially, than the annual rate for all employees (p=.001). In 63% of the companies the rate of users was less than one half that of the whole company; in 53% of the companies, the turnover rate for users was zero.

Employee Morale: Of the 53% of the respondents providing additional comments more than 80% were of a positive nature. These voluntary comments provide strong substantiation of the view that access to child care proximal to the worksite is a highly valued benefit. The conflicts and anxieties experienced by working mothers as to their children's care have been well reported. In contrast, study respondents repeatedly took the opportunity to express appreciation and gratitude that their employer had relieved them of these worries. In an extension of this, several respondents described at length the positive effects attendance at the child care center had on their child.

It is worth noting that negative comments among users of on-site and off-site services primarily focused on the need for an extension of the service or displeasure with the cost of service rather than dissatisfaction with the existing service. Almost never did these employees express dissatisfaction with the child care itself. Employees who used information and referral services as a rule did not have as positive feelings about the service or about their employer for providing it.

DISCUSSION

Looking at the results of the analysis of absenteeism, it is disappointing although not surprising that the relationship between these two variables was indeterminable. There are many reasons for a person's absence that were not represented in our model. For example, a major cause of absenteeism in female employees is caring for their sick children. There was, however, considerable variation among employers as to allowable sick time. Some employers allowed employees to use sick days for either themselves or their child; others allowed employees to use their vacation days when either they or a child was ill; others allowed no conversion of vacation time for unplanned absences. In most companies, attendance records identified vacation days and sick days by category without designating planned or unplanned. But in point of fact, some employees used vacation days for unplanned absences and some sick days were undoubtedly planned. And, of course, a person's own health, transportation trouble or other difficulties may be equally strong determinants of that person's absence. While the results of this study do not settle the issue, it appears unlikely that with the large number of uncontrollable variables and the relatively small proportion of the workforce affected a statistical relationship can be demonstrated between absenteeism and employers providing child care services.

But reduced absenteeism is only one of the effects which have been hypothesized to result from employer supported child care. The findings of this study provide strong support for the claims that these employer services do produce desired measureable effects. For example, employers considering the institution of a child care service as an inducement for recruitment of new employees will have significantly higher probability of success if they offer some form of near worksite child care service rather than an information and referral service.

And the results of this study demonstrate the relationship between an employer's child care service and the employment longevity of the employees who use that service. Study findings show that the availability of either on-site or off-site child care positively effects both acceptance and continuance of employment. In addition, employees who use an employer supported near worksite child care service are more likely to recommend their employer to others than will employees who have access only to an I&R service.

The findings of this study illustrate that when employers sponsor either an on-site or an off-site child care service for their employees a significant reduction in turnover occurs. In more than half the companies and hospitals turnover of employees utilizing the employer supported child care service was reduced to zero; in several others it was less than fifty percent that of the company turnover rate.

Figures on employee productivity are not always easy to obtain. Assessment by supervisors has been found to be an unreliable measure (Milkovich, 1976). In this study employees were asked, not to rate their productivity, but rather their assessment of the effect of the child care service on their job performance. The findings of this analysis provide strong support for the assumption that provision of proximal worksite child care rather than information and referral service positively effects employees' perceptions of their job performance. Little difference was found in this regard between users of on-site and off-site services.

And while not subject to statistical analysis, the voluntarily supplied comments by many of the respondents testify to the positive impact a near worksite employer supported child care service can have on employee morale and attitude.

In conclusion, the results of this empirical study provide a substantial foundation of justifications for corporate child care. Additional statistical evidence of managerial, public relations, cost or promotion benefits could further advance the field. This study can be viewed as a portion of the base of a pyramid building empirical support for employers sponsoring child care services.

I. INTRODUCTION

This project was funded by the Office of Human Development Services with Discretionary Funds in November, 1982. OHDS had designated an interest in employer sponsored family support services and in conjunction with this interest CSR and the Foundation for Human Service Studies proposed this current study.

BACKGROUND INFORMATION

As is so frequently quoted in many news sources the numbers of working women, of dual career families, and of single parent families are larger than they have been in the history of our country. The traditional American family of a working father, non-working mother, and 2.6 children is no longer typical. As of the 1980 Census, in sixty percent of all families with children under the age of 18, both parents were wage earners and 45 percent of all pre-schoolers had working mothers. That proportion is expected to exceed 50% by 1990. By decade's end there may be 10.5 million pre-schoolers with employed mothers, up from 7.5 million in 1980 (Lueck, 1982).

This rapid increase of women in the U.S. workforce can be attributed to a number of elements extant in our society. The economic situation in the country has required that many families now must have two wage earners in order to maintain their existing standard of living. Another factor relating to the changing character of the U.S. workforce is the significant increase in the number of single parents, most of whom are women. Single parent families now constitute one-sixth of all the families in U.S. society. A third influence at work is the change which has occurred during the past twenty years in women's priorities in life. Many women now feel a career is equally important as raising a family and, thus, their return to work shortly after childbirth is based on other than purely economic motivations. Thus the workforce no longer can be viewed as overwhelmingly male. Concurrent with this dramatic increase in working women has been the significant increase in fathers' involvement in child care.

Need for Child Care

A result of these changes in families and in the working population is a well acknowledged growing national need for child care and other family support services. Women and families from all economic, social and educational strata are seeking arrangements of care for their children during their working hours.

Maintaining child care arrangements for many parents involves juggling schedules for work, home and child care. The traditional availability of a relative to care for children generally no longer exists. These potential care takers often have become part of the working population themselves. If not, it is likely that the family is not living geographically near these once available resources as a result of our increasingly mobile society. Child care, therefore, now must be provided more frequently out of the home by non-relatives in a group setting. The questions of who is going to provide this care and who is going to finance it are a growing concern both for working parents and for employers. High quality child care is not only often difficult to find but is also quite expensive when it is available.

There are not nearly enough providers to care for all the children of working parents who need it. There always has been a shortage of such care, but the sudden changes in the labor force have caused the gap between what is needed and what is available to widen quickly.

Responding to Increased Child Care Needs

Kamerman and Kingston (1981) have writen that "certain adjustments and adaptations are needed at the workplace and elsewhere in society if men and women are to fulfill home and work tasks adequately and rear their children well. If such responses are not forthcoming, adults may have difficulty in one, or the other, or both domains, employers may experience problems at the workplace, children may suffer as may the society, ultimately (p. 5-8)."

Although demands for child care in the United States have increased in the recent past, government support for such programs has diminished over the last few years. These decreases in monies along with the changing nature of American industry and its workforce create a rationale for employer support to working parents. As noted by Conference Board Research Fellow Dana Friedman (1983b) a vast array of organizations and individuals are attempting to influence employer behavior so that it becomes more responsive to the needs of working parents (p 1). Some corporations are responding to these needs by entering the child care field. The 1970's and 80's have seen a surge in corporate intervention, along with significant efforts by the public sector to bolster and expand these private activities. At the same time pressures are being exerted on government agencies to maintain a role in the provision of child care, albeit a different role than in the past.

Midyear in 1983, the White House took steps to encourage the growth of employer-sponsored day care by having the Office of Private Sector Initiatives implement luncheon meetings for corporate executives in various communities. During these sessions executive decisionmakers were introduced to child care support services, and were provided with relevant, meaningful information on existing activities and the potential roles of their employees in this blossoming field. Primarily decisionmakers from large corporations were included in these meetings, however consideration is being given to the inclusion of small employers in future gatherings (Sommers, 1983).

These government activities are reflective of a clear effort to encourage private involvement in areas that heretofore have basically been the domain of the public sector. Less government funding is currently provided for child care than in the past and popular opinion espouses the goal of combined public/private endeavors in the area of employer supported child care services.

One means by which government has and can continue to support developments in child care is through tax benefits for employers and employees based on child care costs. For example, the Economic Recovery Tax Act of 1981 provides that payments by the employer for dependent care assistance are not included in the gross income of the employee, and thus not subject to either social security tax or federal tax.

Kamerman and Kingston (1981) investigated the ways in which diverse employers are meeting or attempting to meet the needs of employees with family responsibilities. Health insurance, pension plans, maternity leave, vacation time, flexible schedules (flextime, flexplace, part-time work, shift work), child care service and other employee services were each analyzed. Accurate data is not available for all of these elements and little research has been completed on the effects of any particular factor on family life. The authors recommend a number of areas for future study and emphasis.

Corporate Involvement in Child Care

New interest in employer-sponsored child care which emerged in the late 1970's and early 1980's was sparked by the increasing number of women in the labor force, shortages of trained personnel in high technology and service industries, a new breed of management, and the realization by family-oriented product companies that providing child care was an important image builder (Friedman, 1983b, p. 7).

Literature on employer sponsorship of family support programs is increasing. As recently as ten years ago interest in and information about this form of employer benefit was very limited. The last decade has produced a burgeoning of activity and interest in the role of the employer as related to the family lives of their workers.

In 1978, Katherine Senn Perry (1982) surveyed the universe of employer supported child care programs existing in the United States. She identified 9 industry-sponsored day care centers, 14 centers sponsored by government agencies, 75 by hospitals, 200 by the military and 7 by labor unions. In 1982 the National Employer Supported Child Care Project reported that 415 employers were involved in sponsoring child care services in one way or another (Burud, 1982). This number represents businesses/industries, hospitals, government agencies, and unions whose primary child care service focus included one of the following: a child care center, an information and referral service, a voucher reimbursement program, a family day care program, a parent education program, support of community child care programs or other forms of child care assistance. Of the total employers counted, 197 were businesses or industries and 195 were hospitals. (These numbers have changed since 1982, and although all reports indicate that there are many more employers now sponsoring child care services, no exact nationwide figures exist).

The flourish of activities that has occurred in the recent past, although encouraging and stimulating, needs to be viewed in perspective. Approximately 600 employers nationwide are currently providing a form of child care service to their employees. Surely 600 is a significant number until compared with the total number of employers in the country which is approximately 4.5 million, or even just compared to the number of businesses that have one hundred or more employees, which is approximately 103,000 (U.S. Dept. of Commerce, 1979). Only one-half of one percent of these employers offer a form of child care service.

In responding to child care needs, businesses have selected a range of solutions. Some have instituted child care centers right at the worksite, others have developed centers at a distance from their place of work, others have developed arrangements with existing child care programs to reserve slots for employees and/or give discount rates to employees, still others have developed voucher systems whereby a portion of an employee's child care costs are reimbursed.

The majority of companies who have recently entered into sponsorship of a child care service have selected information and referral as their format. Primarily this selection seems to be tied to the reduced financial commitment required. Unfortunately this does not solve the bigger day care problem of working parents - the lack of adequate numbers of day care slots. If corporations are to play a significant role in terms of family support services, their involvement must be more far-reaching. As emphasized by LaMarre and Thompson (1982), "the optimal solution for industry in this regard is to find a way to encourage expansion of day care services in the private sector while reducing individual employee day care expense in an equitable manner (p. 65)."

Reporting on the Working Parents Project, Ms. Friedman (1983a), theorized that "future development of the field of employer supports to working parents depends upon the formation of innovative and creative partnerships between the public, private and voluntary sectors (p. 7)."

NEED FOR THIS STUDY

Those who support corporate subsidies of day care and other family support services suggest that such actions result in increased worker productivity and, thus, increased profitability. These advocates also mention such issues as decreased absenteeism, improved recruitment efforts, decreased tardiness, lower employee turnover, and improved employee morale. Some organizations which employ large numbers of female technical staff such as hospitals or electronic industries, report that the costs of sponsored child care services are offset by lower costs of recruitment and training and lower rates of employee turnover. And yet a review of the literature on employer-sponsored family support systems reveals that hard data on the actual costs and benefits of these services are not readily available.

The paucity of empirical data on the effects of employer supported child care services was the key element in preparation of this project. A number of companies and the executives of many firms have expressed optimistic opinions about the extent to which programs for working parents will achieve positive measurable outcomes that will be of value to the company. These positive opinions are being voiced primarily by parties currently involved in the provision of employer supported child care, and the proponents of these types of services are equally vocal. Those employers already providing some form of family support services, especially child care services, although often espousing the management values of these activities clearly must have other motivations for implementation of the services, since specific benefits have not yet been substantiated. Most of the research into the realm of employer supported child care services has involved soliciting opinions of their effects and suppositions on the value of providing these services by currently uninvolved companies.

A study done by Milkovich and Gomez (1976) has been one of the few incorporating collection of empirical data. A group of thirty parents using the Northside Child Development Center in Minneapolis, Minnesota, a group of thirty parents with young children not using the center and a group of employees either with no children or only older children were selected for this project. The study's findings were that "the day care participants' average monthly rates of turnover and absenteeism were significantly lower than nonparticipants' turnover and absentee rates and the rates for the other employees. The results of analyses of variance show significant differences among the groups for both turnover and absentee behaviors (p. 113)." This study is frequently referenced, and with good reason; other than this one study, the evidence related to benefits from employer supported child care services is either anecdotal or reported by an individual company about the effects of its own service.

Intermedics, a firm in Texas and the provider of the largest employer sponsored child care program, did complete a non-experimental study of effects. Ms. Alice Duncan, the director of Intermedics Child Care Program, asserts that, as a result of the center being in operation for two years, the company has experienced a 23% decrease in turnover, a reduction in absenteeism that has resulted in a savings of over 15,000 manhours, an increase in productivity, and fewer recruiting problems and reduced recruiting costs (Baden, 1981, p. 30).

The Neuville Mobil Hosiery Mills was requested by their North Carolina legislators to present some figures on the effects of their two-year-old on-site child care center. The company presented the following data: the company saved $40,000 in training of new employees; average turnover for the company is 8% compared with 50% for the geographic area; productivity increased and saved the company $100,000 in salaries (Burud, 1983).

Although the speculations on the benefits of employer's supporting child care services are encouraging and logical, statistical data does not exist to support these views. Many corporate executives are unwilling to make a commitment to the role of the private sector in the provision of child care unless clear evidence of benefit to their company can be documented. These decision makers are of the mindset that first and foremost they are in business. Correspondingly the primary goal of their organization is to make a profit.

Many decision makers believe that businesses are not social service agencies. Indeed, Milton Friedman, a dominant figure in American economic circles, maintains that corporations which spend money for social purposes in effect are stealing their stockholders' money. The incontrovertible fact remains that, no matter how humanistic or socially-oriented management may be, expenditures of either capital funds or current revenues to provide supportive services for employees ultimately must be justified to their stockholders.

Accummulation of additional empirical data of the effects of employer supported child care can provide a boost to growth in this field. Given the frequency of claims as to the positive effects on absenteeism and turnover, this project was structured to specifically gather data on these two aspects. Negative findings will not necessarily produce a negative impact on growth but rather would necessitate that supporters of employer involvement in child care emphasize other motivations for these activities. This rationale may simply be as stated by Armory Houghton (1981) of Corning Glass Works: Day Care is "not big money...But it's the right thing to do, and it's one of those small pockets of excellence by which corporations and their people are judged. Day Care is not only good in itself, but it sets a tone (p. 25)."

According to Dana Friedman (1983a) who has been active in the area of work and family support services for ten years, the field of employer support to working parents is currently in an education phase. Although some corporations and individual chief excutive officers have instituted family support services either to reflect a corporate image or simply to meet the needs of parents, many others are awaiting evidence of benefits prior to entrance into this area. "The lack of awareness of the potential value of family supports as a tool to achieve management objectives is a primary obstacle to their implementation by corporations (p. 7)."

II. STUDY DESIGN AND METHODOLOGY

This study was confined to companies and hospitals in the northeastern and midwestern states that support child care services for their employees. For this study, support was defined as a substantial contribution by the employer of money, staff time and/or other in-kind services to the child care service and an identification by the employer with the service. Sick-child care, flextime, parent education programs and other family support systems were not studied. Schools and colleges which support child care programs for staff, faculty and students were not included. Union supported programs were eliminated as were all of the federal, state, municipal and military units which provide child care services. Employers located within the geographic area of the study were potentially eligible for inclusion if they had sponsored for a year or more one of three kinds of child care services. These were:

- On-Site Child Care: While fees, eligibility requirements and operating responsibilities varied, all employers in this category provided a child care center either in or within one block of the worksite building.
- Off-Site Child Care: Employers in this category supported some kind of off-site child care. These included voucher systems which paid part or all of employee selected services, vendor programs with local or national day care providers and employer operated day care centers away from the worksite.
- Information/Referral (I&R) Services: Employers in this category either operated an in-house I&R service or contracted with an externally operated I&R service to provide this service for their employees.

Employers not sponsoring a child care service for their employees comprised the population for the control group.

This was a retroactive study designed to obtain one full year's attendance data on selected employees of each of the four categories of employers. Additional data were obtained through a self administered questionnaire distributed to subject employees who had used their employer's child care service. Employers were requested to provide turnover rates for all employees at the study site, figures on the turnover of child care users and information on the child care service.

SELECTION OF EMPLOYERS

An initial list of potential participant employers was formulated from the information of the National Employer Supported Child Care Project, Pasadena, California (Burud, 1982). This was supplemented by others gleaned from reviews of the literature, personal contact with knowledgeable people in the field, telephone calls to national day care chains and to community information and referral services. All reported potentially eligible employers were added to the list. The employers on this list were contacted to determine, first, their willingness to participate in the study and, second, their compliance with the following criteria:

- existence of the employer supported child care service for a minimum of one year;
- determination that an absolute minimum of ten female employees with children 6-years-old or younger had been using the service for one year;
- the availability of attendance records on each of the eilgible employees for one year.

Control companies were selected from the same states as the study sites of the experimental employers. Employers in this group were in similar kinds of businesses as those in the experimental group. The majority of employers identified as potential controls were from among those known to have an interest in this area. Some had completed employee needs assessments or conducted other aspects of feasibility studies. Others had attended a symposium or made inquiries about child care services. Still others were recommended by an experimental group employer. In addition to agreeing to participate in the study employers in this group met the following criteria:

- employer had never sponsored a child care support service;
- determination of a minimum of ten female employees with children 6-years-old or younger who had been employed for at least one year;
- the availability of employee attendance records for one year.

Characteristics of Participant Employers

The twelve states in which the study sites of employers and controls were located are:

Connecticut
Illinois
Indiana
Kentucky
Massachusetts
Michigan
Minnesota
Missouri
New York
Ohio
Pennsylvania
Wisconsin

Table I gives a breakdown of the kinds of employers in the study. The classifications used are consistent with those employed by The Bureau of National Affairs, Inc. (1983). The manufacturing companies produced computers and other electronic equipment, paper products, pharmaceuticals, chemical products, food and various small items. The non-manufacturing companies were banks, insurance companies and those in some aspect of information processing/communication. The non-business companies were all providers of health care, primarily hospitals.

TABLE I

BUSINESS CLASSIFICATIONS OF EMPLOYERS

Classification	STUDY CATEGORY			
	On-site n=12	Off-site n=9	I&R n=8	Control n=10
manufacturing:	4	3	2	2
non-manufacturing:	2		3	4
non-business:	6	6	3	4

Twenty-seven of the companies operated single sites. Of the 12 employers operating multi-sites, 7 had more than 10,000 employees. The home office was the study site in 10 of these and a branch site in 2. Table II gives a breakdown of employers by number of employees at the study site for each study category.

TABLE II

BREAKDOWN OF STUDY SITES BY SIZE

	STUDY CATEGORY			
Employees	On-site	Off-site	I&R	Control
250 - <500	2	1		2
500 - <1000	3	2		2
1000 - < 2500	5	2	5	3
2500 - 10,000	2	4	2	3
>10,000			1	

Characteristics of Child Care Services Sponsored by Employers

In nine of the 21 companies which sponsored a day care service fewer than 40 employees used the child care service; seven companies had from 50 to 85 users; and five companies served a hundred or more employees. During the study year the number of employees who used the I&R services sponsored by their employers ranged from as few as 12 to as many as 80. In the following sections are brief descriptions of the child care services in each experimental group. Supplemental information may be found in Appendix A .

Experimental Group 1

By definition, all twelve employers in Experimental Group 1 sponsored day care centers within one block of the worksite. Whether housed within the worksite, on company grounds, or proximal to them, ownership of all twelve centers was vested in the employer, ten of whom also retained responsibility for operation of the center. Of the two remaining centers one was operated by a local day care provider and the second was leased to a day care chain.

Employees of one of the twelve employers paid nothing for the day care service; in two companies, employees paid fees that were comparable to community rates although possibly for a better quality service; in nine companies, employees paid 10-20% less for the service than other community users. At the beginning of the study year (1982), five of the twelve employers had sponsored child care services for employees for more than two years. One employer had been providing this service for 35 years. The newest service had been in operation 5 months.

Experimental Group 2

Five of the nine employers in this group sponsored off-site day care centers which they both owned and operated. Two had made contractual arrangements for their employees to use one of several community sites operated by day care chains and one had contracted for spaces with a local day care provider. In two companies, employees paid fees comparable to community rates and in six their fees were reduced from 10-20%. One of the nine employers which sponsored off-site centers used an income-indexed voucher system. Eligible employees in this company selected their own child care facility.

In 1982, at the beginning of the study year, seven of the employers in this group had provided child care services for two years or more. The maximum length of time a service had been offered was ten years, the shortest was two months.

Experimental Group 3

Of the eight employers providing I&R services, six had contractual arrangements and two had informal agreements with an outside agency. Employee counseling was provided by the employer in three companies and by the I&R service in five. In no case were there charges to the employee for these services. All eight companies in this category had instituted their I&R services less than two years before 1982, the onset of the study year.

SUBJECT SELECTION

Two groups of employees were selected from each of the 39 employers participating in the study. In the experimental companies one of these was from employees who had used the child care service (users) and the second from among those who had not (non-users). Thus for each participant employer two samples of employees were selected:

- user employees
- non-user employees

Similarly, two groups of employees were selected from each control company. One group from those eligible to use a child care service had it been provided (potential users) and a second group from those who would not have been eligible to use a child care service (non-users).

Study Year

Before the identification and selection of study subjects could begin a study year had to be determined for each participating employer. The actual dates of the study year varied from one employer to another dependent upon the company record keeping system and other factors. All study years were for 365 days beginning some time between April 1 and November 1, 1982 (e.g. from May 1, 1982 through April 30, 1983).

Selection of User Employees

From each participant company a random sample was selected of female, full-time employees who had used the child care service for at least one year (user). Study eligibility criteria required that the employees:

- had been employed 30 hours or more per week for the duration of the study year;
- had a child 6-years-old or less at the end of the study year; and
- had used the child care service for the duration of the study year.

The pool of eligible employees was identified by matching the list of employees using the child care service at the beginning of the study year with the list of those using the service at the end of the study year. Whenever possible, subjects were randomly selected in each company from among the users of the daycare service. In 19 companies the number of eligible employees was 20 or less and the entire population of user employees was included in the study. The minimum size sample from any company was 10.

Questionnaires were distributed to all selected user employees. Only those employees who returned questionnaires were retained in the study. However, in several instances the questionnaire provided new information that established non-eligibility of a subject and thus elimination. (Among these were full-time employment status, age of child, or length of employment and/or use of child care service.)

Across all companies the return rate of distributed questionnaires was 80%, thus resulting in a potential sampling bias. This problem is inherent in all data collection procedures which utilize questionnaires. In this instance reasons for this non-return appear to have been diverse. For example, some employees had left the company or had ceased using the center by the time the study was conducted. Other employees had been temporarily laid off or were on a leave of absence. Some employer study contacts were less diligent about providing follow-up to all recipients of questionnaires especially after a minimum number of ten questionnaires had been returned. There did seem to be a relationship between respondent comments indicating a lack of satisfaction with the employer's service and a lower return rate from that company. This may have been the reason for a lower return rate from several employers in Experimental Group 3. Also in this group, many employees had a rather limited contact with the I&R providers. There were indications that these employees had less investment in the service which may in turn have affected the response rate.

Undoubtedly, despite assurances of anonymity, some employees might not have wanted attention directed toward poor attendance records. If so, this would have been only one of several diverse reasons for employees not responding. While sampling bias cannot be automatically eliminated, the small number of user employees for some employers was primarily a function of small numbers of eligible employees in those companies. All eligible user employees returning questionnaires were retained in the study. Attendance data for the duration of the study year was collected on each eligible user employee.

Selection of Non-User Employees

In order to control for the effects on employees of different employment conditions and benefits, in each participant company a sample was also selected of female employees who did not use the child care service (non-users). For purposes of this study, the population of non-users was limited to non-user employees who worked at the same work site as the user employees. A procedure was developed with each employer for the systematic selection of a sample of non-user employees equal to the sample of subject employees. (Details of this process may be found in Appendix B.) Eligibility criteria for inclusion in this non-user sample were that:

- the employee was female;
- had been a full-time employee for the duration of the study year; and
- had not used the child care service provided by the employer.

Since attendance data only were gathered for these employees there was no attrition rate due to nonreturn of questionnaires.

Selection of Potential User Employees in Control Companies

The first task in selection of control subjects was identifying the population of potential users. This process varied dependent upon the size of the control companies and the kinds of company records available. Identification ranged from firsthand knowledge of employees by personnel and/or supervisory staff to review of employee personnel files. Once the population was identified, a random sample of 15 potential users who met the eligibility criteria was selected. Criteria selection included:

- the employee was female;
- had been a full-time employee for the duration of the study year; and
- had a child 1- to 6-years old at the end of the study year.

Often 15 or fewer employees met these criteria and all were included. Some otherwise willing employers had less than 10 eligible potential users and were eliminated from the study.

Selection of Non-User Employees in Control Companies

The sample of non-user employees in control companies was drawn from the population of female employees at the study work-site who had been employed throughout the study year and did not have children 1- to 6-years old at the end of the study year. Procedures used were the same as for the selection of non-user employees in experimental companies.

KINDS OF DATA COLLECTED

Sources of data for this study were the participating employers, the user employees, and the personnel records of all subject employees. Interviews, questionnaires and document searches were used to gather information. The following sections describe the kinds of data obtained.

User Employee Data

Through distribution of a self administered questionnaire (Appendix C), information was gathered from the selected employees who had used the employers' child care service. This information included demographics on the employees, their families, their child care arrangements, their length of employment, reasons for working, income and job status. Employees were also asked about the effects of the child care service on their acceptance of employment, plans to continue this employment, opportunities for promotion, overtime and maternity leave. They were asked to rank the effect the child care service had on their job performance. One open ended question was included at the end of the questionnaire.

Employer Data

During on-site interviews and follow-up telephone calls to employers, information was obtained on the corporation and the child care service. This included figures on the size of the study site and its relationship to the corporate entity, information on the employer's benefit system and on the business itself. A description of the child care service and its history was obtained including as much information on the cost of operation as the employer was willing to share.

Employers were also requested to provide annual absenteeism and turnover rates for all permanent employees or any subsets of employees at the worksite.

Absenteeism Data

The definition for job absence used in the study was that of The Bureau of National Affairs, Inc. which conducts periodic national surveys of job absence and turnover rates from over 300 employers. This organization defines job absence as unscheduled absence. It does not include long term absences after the first four days; scheduled absences for vacation, holidays, or leave; or absences of less than a full day. Using the formula of The Bureau of National Affairs, absenteeism rates were determined by dividing unscheduled days absent by days scheduled to work (1983).

Non-aggregated attendance data for one full year were collected on each selected employee in the experimental companies:

- users of the child care service (n=311)
- non-users of the child care service (n=320)

and in control companies:

- potential users of a child care service (n=130)
- non-users even if there had been a child care service (n=130)

The attendance data for each employee was broken down into the following subtotals: days scheduled to work; days worked; days paid; scheduled paid and unpaid days absent; unscheduled paid and unpaid days absent. The data were obtained retroactively from company personnel files. Dates of all absences were recorded so that absences of more than four consecutive work days could be distinguished from those of four days of less. To ensure maximum consistency of data across companies, guidelines were formulated for calculations of scheduled/unscheduled days absent. All vacation and personal days were documented as planned while all sick days (including sick child) were labelled as unplanned.

Termination Data

Termination data were gathered differently from the attendance data, and not being limited to the study subjects, cannot be considered experimental data. Information on termination of each employer's users of the child care service was obtained and calculated consistent with the procedures used by The Bureau of National Affairs, Inc. (1983). This rate is computed by dividing the number of separations by the number of employees. Turnover figures cover all permanent separations, whether voluntary of involuntary.

Employers were asked to provide a list of all users of the child care service at the beginning of the study year and the end of the study year. The employment status of all female employees not on both lists was determined. For any user employee who terminated her employment at the company during the study year, information was obtained on:

- job category of user employee

- date user employee terminated
- reason (if known) for termination

A turnover rate for one year for female employees who used the service was computed by dividing the number who had terminated during that period with the number of users at the beginning of the study year.

STUDY PROCEDURES

A considerable portion of the time devoted to the conduct of this study was expended in putting together its various elements. The obstructions and delays that were experienced are apparently endemic to field research in the area of employer sponsored child care services. Descriptions of some of these difficulties have been included in this section of the report.

Area Coordinators

Area coordinators were selected to cover different geographic regions of the study area. A total of seven coordinators were assigned to conduct the study activities with all the companies in their region, both employers with child care services and controls. Each coordinator performed all the on-site visits with each of their assigned employers and continued communication until all of the required information was gathered. Each of the area coordinators had an in-depth knowledge of child care programs and then received training in the numerous aspects of this study. The Study Manual used by Area Coordinators is included as Appendix B.

Recruitment of Participant Companies

There exists a limited number of corporations in the northeastern and midwestern states that sponsor a child care service. As a result, almost every company in this category known to project staff was contacted. An initial contact letter was sent to these potential participant corporations (Appendix D). This letter introduced the study and the contractors, described the general purpose of the study and informed companies of an upcoming phone contact regarding potential participation.

Approximately a week after receiving this mailing each company was contacted by phone to pursue its possible role in the study.

The next step with those employers who either agreed to participate, or were at least open to the possibility, was to schedule a site visit by our area coordinator. During this visit, the purpose and procedures of the study were explained more fully and, if the employer agreed to participate, arrangements were made for the selection of the subject employees, distribution and return of questionnaires, and collection of attendance data.

Difficulties in Recruiting Participant Companies

There were several complicating factors that made the process of obtaining corporate agreement to participate more time-consuming than had been expected. With some firms, it was determined during the initial person-to-person contact that the identified service was no longer provided. With other firms it was determined that the firm served many fewer employees then had been indicated in the literature. Other corporations provided a form of child care but a different type than had been reported. Others had been erroneously reported as sponsors of child care services.

In some cases considerable time elapsed before communication could be established with the appropriate corporate person in regard to this project. Some companies refered our inquires to the director of the child care service but this person rarely had authority regarding the information needed. Some firms specified a person to contact but weeks had to elapse until the individual returned from vacation. In one case, the contact person was the Director of Corporate Social Responsibility and in the midst of our negotiations he left the company with no replacement identified.

Many of the corporations that provided an information and referral service contracted with an outside agency for this and did not keep internal records on which employees had utilized the service. The information and referral networks, however, kept track of users names and company affiliations. This situation necessitated that study staff contact the I&R networks and elicit their cooperation in the study. The networks contacted were cooperative and assisted the investigators in working with their client companies but this extra step added more time to the recruitment process.

Some corporations with child care services were unwilling to participate in the study. Among the reasons given for declining were: lack of staff time to gather the data, company policy prohibited doing any kind of survey with employees, and confidentiality of company records. In addition, some employers had received so many requests for information on their service that they had become resistant to further involvement.

Other corporations became non-participants due to administrative decision changes. For example, in one corporation the company child care liason had agreed to participate but the board of the child care center decided not to participate. The designated management person in another company had said they would be part of the study but then the child care staff recommended the company not participate and the company retracted its agreement.

Other difficulties impeded the acquisition of the necessary participants. As stated above, the sample size for participants from each company was a minimum of ten females who had been using the child care service for one year. Early in the study activities it became apparent that a very limited number of corporations are able to fulfill this qualification. Many companies that had enough employees who utilized the child care service were eliminated from the study because not enough of the female users had used the service for a full calendar year. Some female employees use the employer sponsored child care program on a continuous basis except during the summer when a different child care arrangement is utilized. These women, although essentially continuous users of the company child care, were ineligible for this study due to their summer hiatus.

Other companies had enough users but some of them were male and, once the men were eliminated, an adequate number of female users did not exist. The scarcity of adequate pools of users necessitated enlarging the original geographic area to include the states of Kentucky and Missouri.

In addition to the 29 employers with child care services who participated in the study, the cooperation of 71 other employers with similar services was solicited. Of this number, many of whom were interested in participating, 38 did not meet study eligibility criteria. Site visits had been made to 9 of these employers before their ineligibility was determined. Site visits had been made as well to 4 of the 33 employers who did not wish to be included in the study.

Development of Questionnaire

The questionnaire distributed to user employees was developed for this study. A consideration in its development was sensitivity to two frequently expressed employer concerns: a desire that the study neither raise employee expectations nor elicit employees' comments on the quality of the employer's child care services. Each employer reviewed the questionnaire before it was distributed to its employees. No company withdrew from the study because of objections to the questionnaire.

Another factor which affected development of the questionnaire was that it be brief enough and clear enough not to discourage respondents. Before being used in the study the questionnaire was subjected to two cycles of field testing and revision. Three slightly varying forms of the questionnaire were developed to make it applicable to the user employees in each of the three experimental groups (Appendix C).

Field Test of the Questionnaire

Since the universe of child care programs sponsored by for-profit corporations is so finite, the decision was made not to eliminate any of these companies by involving them in a field test but rather to involve programs sponsored by hospitals.

The questionnaire was field tested at two employer-sponsored child care programs: Laurance Armour Day School, Rush-Presbyterian-St. Luke's Medical Center and Lakeview Child Care Center, Illinois Masonic Medical Center.

Based on the responses from the field test and other input from project staff the questionnaire was significantly revised. An additional field test of the questionnaire was conducted at a union sponsored child care center: Amalgamated Child Care Center in Chicago. Based on the results of this field test, the instrument was again revised and then put into final format.

Distribution and Return of Questionnaires

Employers were informed that personal contact with employees by study staff was not necessary for dissemination of questionnaires. The method recommended for distribution was to have the employer hand deliver packets to each of the subjects. Alternate methods were utilized when desired by the employer and these included having the child care program distribute them, having the information and referral service deliver them, or sending them through the mail.

From the outset employers were assured that employees would be treated anonymously throughout the study. This was accomplished by assigning each employee a subject number that was utilized on all materials for that person. In instances where the employer gathered all study data, no employee names were ever obtained by the study staff.

Each participant company was given the option of including a consent form in each questionnaire packet. This form specifically enabled the subject employees to indicate that study staff had their permission to review their attendance records. Some employers elected not to use these based on the assured anonymity of data collected. Others chose to include consent forms to fulfill their obligation to maintain employee confidentiality.

Questionnaire packets distributed to each of the user subjects included the appropriate form of the questionnaire (Appendix C), an envelope for returning the questionnaire, a letter from the Study of Employer Sponsored Child Care (Appendix E), a letter from the employer (Appendix F), and, depending on the participating company, a consent form (Appendix G), and an envelope for its return. All items within the packet contained the subject number of the individual. The return envelopes included in the questionnaire packets were pre-addressed to the selected returnee.

The method recommended for return of the questionnaires was that subjects would personally return them to the distribution individual. Other options were acceptable and employers selected their preferred method. In some cases questionnaires were returned by mail and in one case, at the company's request, study staff met with a group of subjects to have them complete and return the questionnaires on the spot.

Employers were asked to request nonrespondents to return questionnaires.

Collection of Attendance Data

An arrangement for collection of the attendance data was established individually with each participating company. Various factors influenced the method selected. First was the willingness of the company to utilize internal staff for the data gathering, ranging from performing the total tasks to merely providing minimal direction to study staff in gathering the data. A second factor was the corporate system in place for maintaining attendance information. The system determined to some extent the necessary activities of in-house staff. Those companies operating a computerized system gathered all data internally based on logical restrictions to study staff, whereas, those having manual systems were not restricted technically to employing their own people. A third aspect affecting the collection of attendance data was company policy on confidentiality of records.

Actual collection of the attendance information throughout the thirty-nine participant companies was ultimately accomplished by a wide range of procedures. Staff of some corporations literally gathered every bit of data required. At the other extreme, study staff reviewed weekly time sheets located in multiple locations for each subject from an employer. In the most complex situations, identification of relevant attendance forms necessitated selection from extensive numbers of non-categorized forms in inaccessible places.

Information gathered in the field for each subject employee was initially recorded on the Attendance Data Form (Appendix H) and then summarized onto the Attendance Data Summary Sheet (Appendix J) prior to being coded. In total, data were gathered on 311 users from experimental companies, 320 non-users from experimental companies, 130 potential users from control companies, and 130 non-users from control companies.

DATA ANALYSIS PLAN

Covariate analysis was chosen as the analytic tool for this analysis because of the quasi-experimental nature of the data collection procedure. Companies were not randomly assigned to their various types of child care service conditions and subjects were not randomly assigned to their user status. Thus, the use of simple correlations would provide no information about the causal nature of observed relationships between our independent variable and our dependent variables. Confounding variables could vary systematically with the independent variable, type of child care service, and leave us unable to determine whether an observed relationship was caused by type of child care or these confounding variables. For example, if a significant correlation was found between type of child care and the absenteeism rate, it could be argued that employees of smaller companies are absent less. Thus, the causal relationship would be between size of the company and the absenteeism of the company. The simple correlation, therefore, would not give us the desired information, i.e., the true effect of the type of child care provided by the employer.

Separating out these confounding effects is a benefit of covariate analysis. This technique permits you to look at partial relationships, that is, the relationship between two variables when other possible confounding variables, called covariates, are held constant. By holding these variables constant, we are essentially asking, if the covariates were the same for all companies, what relationship would we then observe between the independent and dependent variable? This allows us to have a greater confidence that a truly causal relationship exists between the independent variable and the dependent variable when a significant correlation is observed.

An important consideration in multivariate analysis (covariate analysis is one type of multivariate analysis) is the power of the statistical test. Power, which refers to the ability to detect an effect when one is present, is affected by the number of regressors, k, relative to the sample size, N. Regressors are the variables that are used to predict the dependent variable. They include all the covariates and the independent variable. N-k, the sample size minus the number of covariates, varies as either the sample size increases or decreases or the number of regressors increases or decreases. Thus, the power to find relationships also varies. For example, if N-k equals 43, we would only be able to detect correlations as large as .40 about 80% of the time. If the true correlation were less than .40, it would be detectable even less often. However, if N-k equals 190, population correlations of .20 would be detectable 30% of the time. Thus, as N-k increases, the chance of finding true population correlations when they are small also increases (Darlington, unpublished MS).

The present analysis required that we control for many covariates (large k). In order to obtain a high powered analysis, we chose to use the individual subjects as the initial unit of analysis. This increased our N from 4 to 400, therefore increasing our ability to find a relationship if one existed. However, it is also important that individuals be independent of each other. This consideration required that the employer be used as the unit of analysis at the final stage of the analysis.

Partial correlation coefficients can be computed in several ways. Since the analysis required shifting from the individual level to the company level of analysis, we utilized the following procedure. First, using multiple regression, type of child care was predicted from the covariates. Again, the covariates are the variables that we had wanted to control. We then extracted from this analysis the part of our independent variable that was not explained by the covariates. This was accomplished by taking the residuals from the analysis. A residual is defined as the difference between the actual value of the variable and the predicted value of the variable obtained from the regression. In the first step of the analysis, we obtained a residual score for each subject.

A similar procedure was used to compute a residual value for each subject on the dependent variable. At this point, we had residual scores for each subject for the independent variable, type of child care, and the dependent variable. These residuals represented that part of the type of child care and the dependent variable that were independent of the covariates used. Computing the partial correlation required only finding the simple correlation between these two sets of residuals. However, in order for the values used in the correlation to be independent of each other, we aggregated across companies before computing the partial correlation. That is, for each company, we computed the mean residual for type of child care and the mean residual for the dependent variable. The correlation between the mean residuals resulted in the final value of the partial correlation. The significance of this correlation was then assessed based on the sample size equal to the number of employers who received mean residuals.

Additional analysis of the statistically significant relationships was undertaken. A significant partial correlation only provides information about the existence of an effect, it doesn't locate the effect. That is, the correlation coefficient does not provide information about the differences between the various types of child care services. It does not tell us whether differences exist between on-site child care services and off-site child care services or whether the major differences are between information and referral services and off-site child care services. Thus, the mean residual for the dependent variable was computed for each type of service. By comparing these means, it is then possible to specify the location of the differences. The actual value of the residual is not, in itself, very informative. The differences between the residuals, however, do provide important information. For this reason, we chose to plot the relative values of the residuals, rather than the actual values.

Missing Data

Subjects who had missing values on one or more of the variables were eliminated from the analysis. Elimination of subjects resulted, in some cases, in lowering the number of subjects of an employer to such an extent that the employer had to be excluded from the analysis. Except where otherwise noted, whenever the number of subjects in a given company dropped below half the average number of subjects over all the companies, that employer was eliminated from the analysis.

Description of Independent Variable

Type of child care service was the independent variable in all analyses. Four levels of service were included in this study: on-site child care, off-site child care, information and referral services (I&R), and no service. The amount of child care service provided can be measured on an ordinal scale. On-site child care provides the greatest amount of service, off-site child care an intermediate amount of service, information and referral a lesser amount of service, and no service falls at the bottom. While it is possible to specify the relative ordering of the four types of child care, it is difficult to specify how great the differences are between each of the four types of service. For this reason we coded the amount of child care service on two different scales as indicated below.

Type of Service	Scale A	Scale B
On-Site	4	7
Off-site	3	6
I & R	2	3
No Service	1	1

Scale A assigns equal intervals between each of the four types of service. This is equivalent to saying that the difference between on-site child care and off-site child care is the same as the difference between off-site child care and information and referral. Scale B does not assign equal intervals. This scale sets on-site and off-site child care as one unit apart from each other, and information and referral and no services as three and five units away from off-site child care respectively. This scale assumes that on-site day care and off-site day care are relatively similar in the amount of service that they provide, and that the other two types provide considerably less or no service.

Description of Dependent Variables

Seven dependent variables were investigated. In all cases, the basic question was the same: "Does type of child care service have an effect on the dependent variable, when the covariates are controlled?" The seven dependent variables are described below.

Absenteeism: An absenteeism ratio was computed for each individual as follows:

$$\text{Absenteeism Ratio} = \frac{\text{total unscheduled days off}}{\text{total days scheduled to work}}$$

The values for "total unscheduled days off" and "total days scheduled to work" were obtained from company records.

Acceptance of employment. The following question was asked of subjects who were informed of the child care services when they began employment at their companies: "Did the availability of this service influence your decision to accept this employment?" A value of 1 was assigned for a "yes" answer and a value of 0 was assigned for a "no" answer to the variable Accept.

Continuance of employment. Subjects were asked: "Does the availability of this child care service influence your decision to continue your present employment?" Subjects received a value of 1 for a "yes" answer and a value of 0 for a "no" answer for the variable Continue.

Recommendation of employer. The following question was asked: "Have you ever recommended your employer to others because of the availability of the child care services?" "Yes" and "No" responses received values of 1 and 0, respectively.

Available to work overtime. Subjects were asked the following question: "Has this child care service made it possible for you to work overtime or odd hour shifts?" This question was not applicable for certain companies or for certain employees, thus when evaluating the effects of child care services on this variable only the responses of subjects who answered either "yes" or "no" were included. As before, a "yes" response received a value of 1 and a "no" response received a value of 0.

Acceptance of promotion. Subjects were asked: "Has this childcare service made it possible for you to accept a promotion or a new position?" As was the case with Overtime, this question was not applicable for many of the subjects, and thus, only those who responded either "yes" or "no" were included in this part of the analysis. A "yes" response was coded as 1 and a "no" response was coded as 0.

Effect on job performance. All subjects responded to the following: "The child care services available through my employer:
(1) have little or no effect on the way I do my job.
(2) have a somewhat positive effect on the way I do my job.
(3) have a very positive effect on the way I do my job."

This item was coded using an equal interval scale (1,2,3) as indicated above.

Covariates

The variables that were used as covariates can be divided into three general groups; demographic characteristics of the subjects, characteristics of the employers, and characteristics of the non-child care users of the employers. Twenty-one covariates are described below.

Demographic Characteristics

Adults: the number of adults living in the household.

Family Structure: this variable controlled for the difference between single-parent and two-parent families.

Age of Children: the number of children within a given age range. The variable was coded as the number of children (1) less than one, (2) one to less than two, (3) two to less than five, (4) five and six, (5) seven through thirteen and (6) fourteen through eighteen years-of-age.

Age: the age of the employee.

Education: the educational level obtained by the employee. This variable was coded as (1) less than high school, (2) some high school, (3) high school graduate, (4) two years after high school, (5) college graduate and (6) graduate or professional study.

Reason for Working: this variable identified three possible reasons for working. Either the employee is (1) the main support for the family, (2) an essential contributor to a two-family income or (3) motivated to work although the income is not essential.

Months: the number of months working for the company.

Hours: the number of hours per week worked. This is broken down into (1) under 30 hours (2) 30-40 hours and (3) over 40 hours.

Overtime: this variable identified those employees who are paid for overtime.

Family Income: the total income of the household before deductions. This included employee's and spouse's income where applicable.

Length: the amount of time spent going to work. This was coded as (1) under 1/2 hour, (2) 1/2 to one hour or (3) over 1 hour.

Shift: the shift the employee works. This categorizes employees working into (1) day shift, (2) evening shift or (3) other shifts.

Extended Leave of Absence: this variable controlled for those employees who had taken an extended leave of absence in the last year.

Holidays: the number of holidays the employee is entitled.

Vacation: the number of vacation days, floating holidays, and personal days the employee is entitled.

Total Days Worked: the total number of days worked in the last year. This variable was not used in the statistical analysis of absenteeism because of the amount of overlap between the two variables.

Employer Variables

Complete data was collected on two employer variables and these were entered into the analysis as covariates.

Company Size: companies were classified into six categories. These were (1) less than 250, (2) 250 to 499, (3) 500 to 999, (4) 1000 to 2499, (5) 2500 to 9999 and (6) greater than 10,000 employees.

Size of the Study Site: the study site did not always encompass the entire company. It may have been at a branch office or restricted to some part of the company, like the home office. This variable was classified in the same six categories used for the variable company size.

Non-user Variables

Data was collected on a number of non-users of the child care services of the companies. Certain variables were computed from this information in order to control for additional characteristics of the employer. A value for each employer was computed and entered into the analysis.

Mean Extended Leave of Absence: this was the mean number of days of extended leave of absence in the company for non-users of day care.

Mean Number of Holidays: this was the average number of holidays of non-user employees in the company.

Mean Number of Vacation Days: this was the average number of vacation days, floating holidays, and personal days for non-users in the company.

Mean Number of Days Worked: this was the average number of days worked per year of non-user employees in the company.

III. FINDINGS AND DISCUSSION

The primary purpose of this study was to determine whether different kinds of employer supported child care services had differing effects on the users of those services. In gathering the data base needed for the covariate analyses conducted for this study considerable additional information was obtained. A substantial portion of this came directly from the users of the child care services.

Because much of the information found in the literature on employer supported child care has come from the employers we have made the assumption that others in the field would find value in a more detailed reporting of the users responses. Thus this section of the report includes demographics on the user employees, the findings of the covariate analyses undertaken relative to absenteeism and six other dependent variables, a descriptive analysis of the termination data, the results of several cross tabulations of different employee responses and a compilation and examination of the optional employee comments.

DEMOGRAPHICS ON USER EMPLOYEES

The self-administered questionnaires provided a variety of demographic characteristics on the subject employees. Although it cannot be stated with absolute certainty that all females utilizing employer supported child care services match these patterns, it is likely that these demographics are fairly representative of this group. Unless stated otherwise the following figures were basically consistent across the three types of users.

Age: The median age of the 311 female respondents was 30. Fifty-nine percent of the subjects were between 27 and 33 with the range being from 21 to 52 years.

Schooling: For the entire sample of user employees, one third had completed high school and 64% had completed two or more years of college.

Household Composition: More than two-thirds of the respondents (73%) were married parents living with spouse and children; two percent of these had other adults in the household as well. Single parents living alone with children comprised 18% of the population; another 8% were single parents living with another adult(s).

Work: All the study subjects worked thirty or more hours per week and none had worked for their present employer less than one year. The length of employment for all users ranged from twelve months to twenty years, with almost two-thirds of the respondents having worked for their employer between two and ten years. Sixty-seven percent were nonexempt employees.

Income: Slightly more than half of the women were earning less than $18,000 per year and 86% were earning less than $26,000. Fewer than 5% reported salaries of more than $35,000 per year. The reasons given by subjects for working showed that slightly more than half (53%) of these women worked because their family needed more than one income. Twenty-nine percent were the main support for their families. Only 18% of the users reported that their income was not essential but rather that working was important to them. Respondents reported the following family incomes: 4% were under $10,000, 20% were earning between $10,000 and $18,000, 17% were between $18,001 and $26,000; 18% earned $26,001 to $35,000; and 41% were earning over $35,000.

Day Care Loci: Seventy-five percent of the respondents reported that all their day care was in one location, only 11% reported using several non-proximal day care arrangements. One half of the respondents who used I&R services reported using family day care homes; 28% used day care centers. Obviously, respondents using on-site and off-site services primarily used day care centers.

ANALYSES

The analysis of absenteeism was conducted at two different levels; for four types of service and three types of service. All other analyses involve only three levels of child care service (on-site, off-site, and information and referral), since the dependent variables for these analyses were not measured in companies providing no services. Type of child care service was the independent variable in all of the analyses.

We analyzed the data once using scale A coding and once using scale B coding. Scale A coding assigns equal intervals between each of the four types of service. Scale B coding sets on-site and off-site child care services as one unit apart from each other, and information and referral (I&R) and no services as three and five units away from off-site child care services, respectively (see page 31). In all cases, when a significant relationship using scale A was found, a significant relationship using scale B was also found. While there was a trend for scale A coding to be less significant, we chose only to report results using scale B coding because it is believed that this coding is a better reflection of the relationships between the different types of child care service.

Absenteeism Analysis

Two separate analyses were undertaken to investigate the effects of child care services on the absenteeism of women who use these services: One included all four levels of child care; the second included only three levels, i.e. on-site, off-site, information and referral. Separate analyses were suggested because of the limited data available from the employers not providing any child care services. The only covariate data received from these employers were the employer covariates, the non-users covariates, and the individual variables of absenteeism, holidays, vacation days, and extended leave of absence on a group of potential child care users. We did not have demographic information such as age, education, and number of children on the potential users. The four-level analysis of absenteeism, therefore, controlled for fewer covariates.

Four-Level Analysis

Four employers were eliminated because of missing data. The average number of subjects per employer was 11.4. The distribution for the four-level analysis was:

Type of Service	Number of Companies
On-site	12
Off-site	8
I & R	5
No Service	10

Variables controlled for included: extended leave of absence; holidays; vacation; company size; size of the study site; mean extended leave of absence; mean number of holidays; mean number of vacation days; mean number of days worked.

Relevant Statistics:

$pr = .164 \quad t = .95 \quad df = 33$

$p > .05 \quad b = .004 \quad s = .0046$

This low correlation suggests that type of child care service does not have a direct effect on absenteeism. However, this conclusion may be premature, as is discussed below.

Three-Level Analysis

The second analysis of absenteeism considered only three levels of child care service. Twenty-six employers were included in this analysis with a mean number of subjects per employer of 10.2. The following is the distribution of employers for the three-level analysis:

Type of Service	Number of Companies
On-site	12
Off-site	8
I & R	6

Eleven covariates in addition to the covariates used in the four-level analysis above included: adults; family structure; age of children; age; education; reason for working; months; overtime; family income; length; shift.

Relevant Statistics:

$pr = 0.00 \quad t = 0.00 \quad df = 24$

$p > .50 \quad b = -.002 \quad s = 1.099$

Discussion of Results of Absenteeism Analysis

Although the partial correlation was small in both the three-level and four-level analyses, this does not necessarily imply that there is no relationship between type of child care service and absenteeism. In the three-level analyses, the standard error of b (s = 1.099) is extremely large. The value of b represents an estimate of the slope of the regression line, and the standard error of b represents, to some degree, the accuracy of that estimate. If a 95% confidence interval is constructed around the observed value of b, the following range is obtained:

95% Confidence Interval = b ± (s) (t): t = t at .95 level;

0.002 ± (1.099) (2.064) = 0.002 ± 2.268 = -2.270, +2.266.

This indicates that based on our sample, one can be 95% certain that the true population value of b is between -2.270 and 2.266. A b as large as 2 or -2 would indicate a very important effect of absenteeism on type of child care service. In other words, because of the extremely high value of s, it is impossible to accept the hypothesis that the true correlation is zero. On the other hand, because of the low value of b, it is also impossible to say the true correlation is not zero. Thus, given our sample, no conclusions can be drawn as to the relationship between absenteeism and type of child care service.

Looking at these results from a different perspective, it does not seem surprising that the relationship between these two variables was indeterminable. There are many reasons for a person's absence that were not represented in our model. For example, a major cause of absenteeism in female employees is caring for their sick children. There was, however, considerable variation among employers as to allowable sick time: Some employers allowed employees to use sick days for either themselves or their child; others allowed employees to use their vacation days when either they or a child was ill; others allowed no conversion of vacation time for unplanned absences. In most companies, attendance records identified vacation days and sick days by category without designating planned or unplanned. But in point of fact, some employees used vacation days for unplanned absences and some sick days were undoubtedly planned. And, of course, a person's own health, transportation trouble or other difficulties may be equally strong determinants of that person's absence.

In the four level analyses, although we were provided with fewer covariates, the greater range of absenteeism and the larger sample size provided us with more power to find a difference. However, by not controlling for the missing covariates, we may be unjustly attributing the effects of these confounding variables to the type of child care service. Even with these possible biases toward a significant effect, our t does not reach significance (t = .95). Analogous to the three level analysis, this does not mean that there is no effect of type of child care service on absenteeism. We can only conclude that we have not determined the effect.

Acceptance of Employment Analysis

In many cases, subjects were not informed of the availability of the child care service at the time of their initial employment, often because in several companies the service was relatively new. The analysis of the influence of child care services on acceptance of employment, thus had a smaller sample size. Ten employers were eliminated as a result of the smallness (or absence) of the sample. The distribution was: 10 on-site; 6 off-site; and 3 I&R. The mean number of subjects per company was 6.0. All covariates listed on pages 33-35 were controlled.

Relevant Statistics:

$pr = .688$ $t = 3.91$ $df = 17$

$p < .001$ $b = .120$ $s = .031$

This correlation is significant at the .001 level. The small value of the standard error of b (.031) should also be noted. Taken together, the large value of the partial correlation coefficient and the small value of the standard error of b, give us confidence that a true relationship between type of child care service and acceptance of employment does exist.

Subjects felt that the influence of the child care service on their decision to accept employment was greater when more services were provided by their companies.

The relative value of the residuals for each type of child care are shown in Figure 1. As can be seen each increase in the amount of service provided by an employer results in an increase in the residual. This can be interpreted as follows: Employees whose employers provide only I&R services are not very likely to state that the child care service had an influence on their acceptance of employment. It is possible to increase the probability that an employee will state that such services influence acceptance of employment by providing more services. The difference between the residuals for off-site services and I&R services reflects this increased probability.

In conclusion, it was found that provision of day care services had a significant influence on the subjects' decisions to accept employment. Specifically, employees of off-site companies and on-site companies were approximately 20% and 30% more likely, respectively, to state that the services had an influence on their decisions, than were employees of I&R companies.

Continuance of Employment Analysis

The analysis of the effect of employer-supported child care services on the continuance of employment was conducted on 25 companies: 12 on-site; 8 off-site; and 5 I&R. The mean number of subjects per company was 13.0. All covariates listed on pages 33-35 were controlled.

Relevant Statistics:

$pr = .541$ $t = 3.08$ $df = 23$

$p < .01$ $b = .067$ $s = .022$

This partial correlation is significant at the .01 level, indicating that the amount of child care services provided does have a positive influence on employees' decisions to continue their present employment. The relative values of the mean residuals are shown in Figure 2.

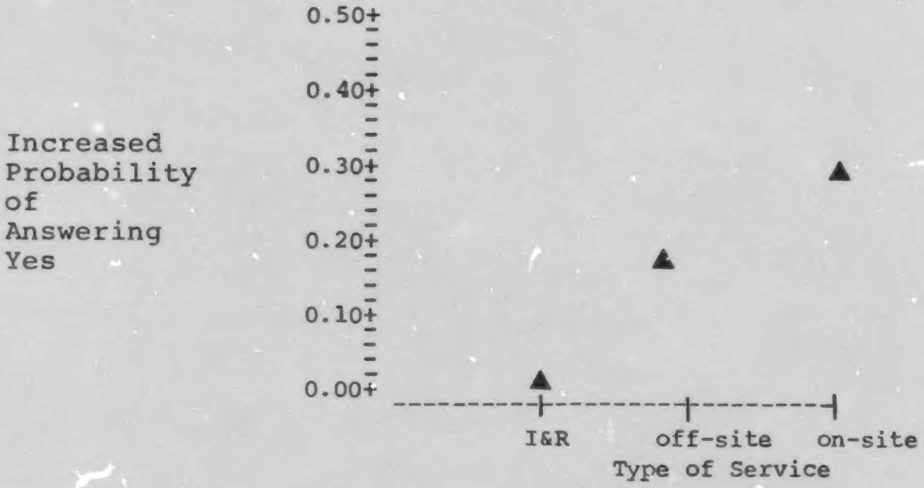

Figure 1: Effect of Child Care on Acceptance of Employment Relative Value of Mean Residuals

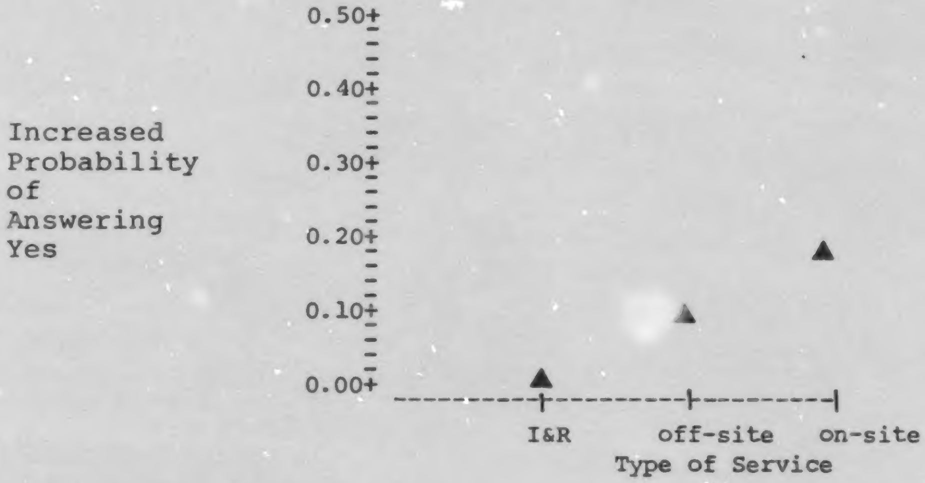

Figure 2: Effect of Child Care on Continuance of Employment Relative Values of Mean Residuals

While the pattern here is similar to that of the previous analysis, the magnitude of the changes is considerably less. Users of off-site and on-site services were only 10% and 16% respectively more likely than users of Informational and Referral services to state that the employer provided services had an influence on their decisions to continue their present employment. We can thus conclude that while subjects felt that their employer's child care service had a positive effect on their decision to continue employment, this influence was not great.

Recommendation of Employer Analysis

The analysis of the effect of child care service on the recommendation of one's employer to others was conducted on 23 companies: 12 on-site; 7 off-site; and 4 I&R. The mean number of subjects per company was 14.6. All covariates listed on pages 33-35 were controlled.

Relevant Statistics:

$pr = .778 \quad t = 5.68 \quad df = 21$

$p < .001 \quad b = .122 \quad s = .022$

This partial correlation is significant at the .001 level, indicating that the degree of child care service provided by an employer does have a positive influence on employees recommending their employer to others. The relative values of the mean residuals for each type of child care service are given in Figure 3.

In this analysis, the responses of employees utilizing off-site services and on-site services did not differ significantly from one another. Both of these groups were approximately 30% more likely than the information and referral employees to state that they had recommended their employer to others because of the child care services. In conclusion, employees were more likely to recommend their employers to others when either off-site or on-site child care services were provided by their employer.

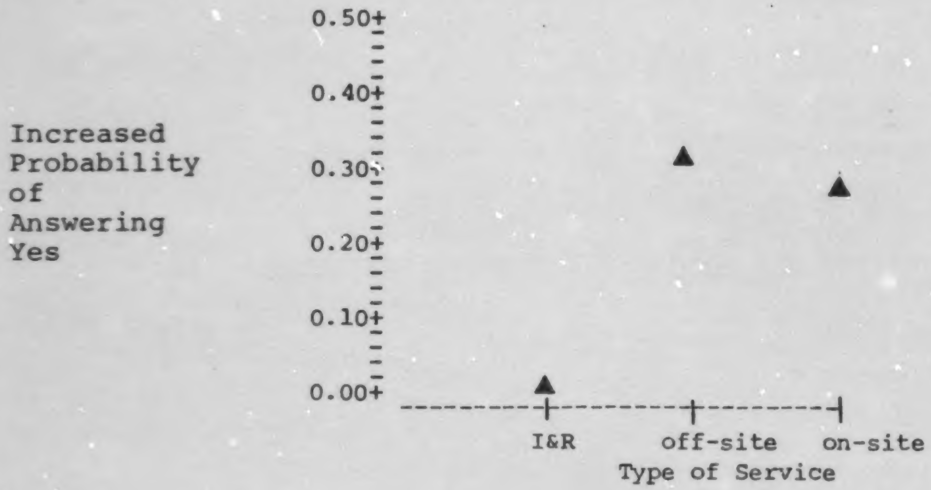

Figure 3: Effect of Child Care on Recommendation of Employer
Relative Value of Mean Residuals

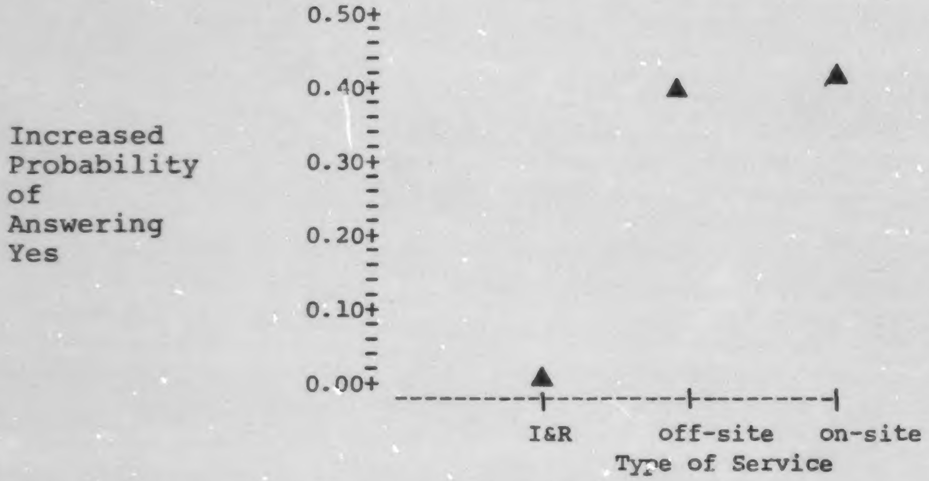

Figure 4: Effect of Child Care on Availabilty for Overtime Work
Relative Value of Mean Residuals

Availability to Work Overtime Analysis

This analysis was based on the subset of subjects for whom additional pay for overtime was given. The effect of day care services on the ability to work overtime was analyzed for 23 companies. The distribution of companies was: 12 on-site; 8 off-site; and 3 I&R. The mean number of subjects per company was 8.5, however, we chose to include two companies (both I&R) with only four subjects each. All covariates listed on pages 33-35 were controlled.

Relevant Statistics:

$pr = .661$ $t = 4.04$ $df = 21$

$p < .001$ $b = .134$ $s = .033$

This partial correlation is significant at the .001 level, indicating that the amount of child care service provided by an employer has a positive effect on an employee's ability to work overtime. The relative values of the mean residuals for each type of child care service are shown in Figure 4.

As in the previous analysis, the values for off-site and on-site child care did not differ significantly from each other. They were both larger than the value for the information and referral companies, however. Employees of companies providing on-site services and off-site services were approximately 40% more likely to state that they were able to work overtime or odd hour shifts because of the services provided by their employer. In conclusion, employees were more likely to be able to work overtime or odd hour shifts when either off-site child care services or on-site child care services were provided by their employer.

Acceptance of Promotion Analysis

The analysis of the effects of day care services on the possibility of accepting a promotion was based on 22 companies. The distribution of companies was: 12 on-site; 7 off-site; and 3 I&R. The mean number of subjects per company was 5.2. All covariates listed on pages 33-35 were controlled.

Relevant Statistics:

$pr = .279$ $t = 1.30$ $df = 20$
$p > .10$ $b = .060$ $s = .046$

This analysis did not find a significant relationship between type of day care service and acceptance of promotion. It should be noted, that as a result of the large number of subjects stating that this item was not applicable, this analysis was based on relatively few subjects per company. Several of the companies were represented by only three employees.

Effect on Job Performance Analysis

The analysis of the effect of employer provided child care service on perceived job performance was conducted on 26 companies. The distribution of companies was: 12 on-site; 8 off-site; and 6 I&R. The mean number of subjects per company was 10.0. All covariates listed on pages 33-35 were controlled.

Relevant Statistics:

$pr = .647$ $t = 4.14$ $df = 24$
$p < .001$ $b = .187$ $s = .045$

This partial correlation was significant at the .001 level, indicating that the amount of child care services provided by an employer has a positive effect on perceived job performance. The values for the mean residuals for each type of child care can be seen in Figure 5.

In this analysis, the responses of users of off-site child care and on-site child care did not differ significantly from each other. Users of off-site services were 50%, users of on-site services 45%, more likely than users of I&R services to state that the employer provided services had a positive influence on their job performance. In conclusion, employees in companies which provided either on-site or off-site child care services were more likely than those in companies which sponsored I&R services to say that the child care service had a positive effect on the way they did their job.

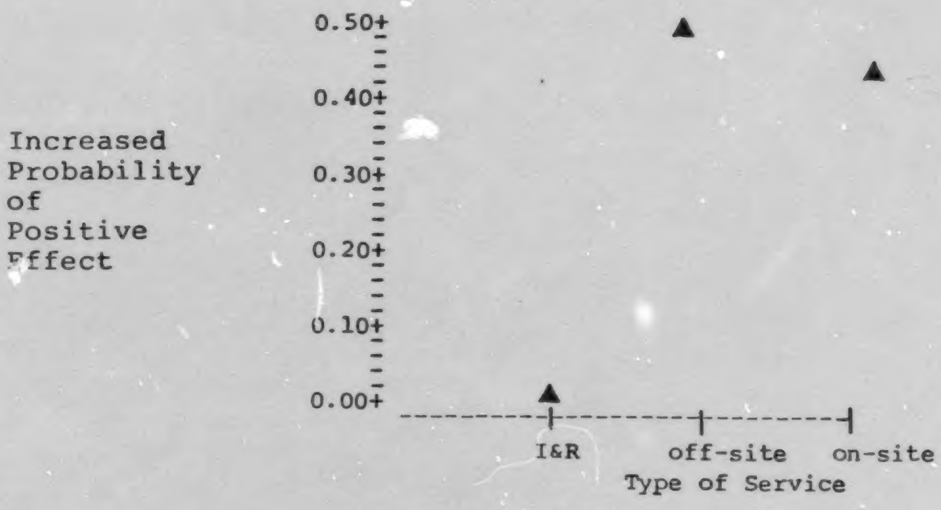

Figure 5: Effect of Child Care on Job Performance Relative Values of Mean Residuals

Discussion of Analyses of Other Dependent Variables

Three-level analyses were undertaken for six dependent variables based on employee assessments of the effect of the child care service on various aspects of their work behaviors. This section is a discussion of these analyses. The results of the analysis of the dependent variable absenteeism is included above.

Employers considering the institution of a child care service as an inducement for recruitment of new employees will have significantly higher probability of success if they offer some form of near worksite child care service rather than an information and referral service. In addition, their recruitment efforts will be doubly enhanced since those current employees who used the near worksite child care service will be more likely to recommend them to other potential employees than will the employees who have access to an I&R service. Further, use of near worksite child care rather than an I&R service will increase the likelihood of employees continuing their tenure.

Figures on employee productivity are not always easy to obtain. Assessment by supervisors has been found to be an unreliable measure (Milkovich, 1976). In this study employees were asked, not to rate their productivity, but rather their assessment of the effect of the child care service on their job performance. The findings of this analysis provide strong support for the assumption that provision of proximal worksite child care rather than information and referral service positively effects employees job performance. Little difference was found in this regard between users of on-site and off-site services.

Similarly the ability of an employee to work overtime or odd hour shifts was significantly higher for users of either on-site or off-site child care. The value of this will of course be employer specific. However, the willingness and ability of its employees to respond to less desireable shifts or unscheduled labor demands would be likely to have a positive effect on an employer's level of productivity.

ANALYSIS OF TERMINATION DATA

An annual turnover rate was computed for female users of the child care services in all companies and hospitals with either on-site or off-site services. It was not possible to obtain the needed data to compute this from employees with I&R services nor from the control companies. Turnover rates for all employees were obtained from eight of the employers with on-site and nine of the employers with off-site services (TABLE 3).

For sixteen (94%) employers the annual turnover rate for employees who used the child service was lower, often substantially, than the annual rate for all employees ($p = .001$). In 63% of the companies the rate for users was less than one half that of the whole company; in 53% of the companies, the turnover rate for users was zero.

TABLE 3

EMPLOYEE TURNOVER RATES

On-Site Services		Off-Site Services	
Users	All Employees	Users	All Employees
0.0	3.0 (M)	0.0	9.8 (M)
0.0	11.0 (H)	0.0	10.0 (M)
6.0	11.7 (N)	0.0	12.0 (M)
0.0	12.0 (H)	0.0	13.0 (H)
		5.6	15.0 (H)
0.0	13.4 (H)	6.2	15.0 (H)
13.2	15.0 (H)	10.4	18.3 (H)
0.0	19.5 (H)	9.5	21.4 (H)
4.8	21.6 (M)	33.3	31.4 (H)

M - manufacturing companies n=5

N - non-manufacturing companies n=2

H - Health Care Providers n=10

p = .001

The one obvious exception to this was a health provider which had reported a recent change of management, low employee morale, and a large number of recently terminated employees. Not unexpectedly, both categories of turnover rates for this employer were considerably higher than those of other employers. It would appear that any positive effect of this employer's child care service on user employees' job stability was nullified by other employment related factors.

Discussion

While these results have not been determined through experimental methods, the process used to collect the data and compute the turnover rates are consonant with those used to establish national norms. The consistent pattern of marked reduction in turnover rates strongly supports the claim that worksite or near worksite child care has a positive effect on employee stability. This conclusion is further supported by the findings reported above of the effect of child care service on employees' decisions to continue employment.

The cost savings resulting from a reduction in turnover rate will be employer specific. Computation of these would need to take into consideration the employer's recruitment costs, new hire costs, new employee training costs, and the number of employees affected by the child care service. These all differ for each employer. While it is beyond the scope of this report to compute these, it is apparent that an employer can realize reduced personnel costs as a direct result of providing a near worksite child care service.

SUPPLEMENTAL ANALYSES

Covariate analyses were conducted to ascertain the possibility of relationships between selected employee characteristics and the dependent variable absenteeism. An analysis of the income level of user employees and absenteeism did not find a significant relationship. Nor did a similar analysis of single adult versus multiple adult families and absenteeism.

Employees were asked whether the availability of the child care service enabled them to shorten their maternity leave. A necessary condition for a possible affirmative response was the provision of infant care by the employer and there was some evidence of ambiguity in respondents distinction between "no" and "not applicable" answers. Slightly more than 20% of the respondents reported that their employer's child care service enabled them to return to work earlier following delivery. No further analysis of the data was undertaken. The numerical responses to this item were:

		Yes	No	NA
On-site Users	(n=142)	29	33	80
Off-site Users	(n=96)	28	21	47
I & R Users	(n=66)	7	18	41
Total	(n=304)	64	72	168

Cross tabulations were undertaken of different dependent variables with selected characteristics of the employees who used either on-site or off-site child care. No relationship was found between number of adults in the family and the dependent variable "did the child care service influence decision to continue employment". Similarly no relationship was determined between number of adults in the family and "did the child care influence decision to accept employment". Nor was one shown between number of adults in the family and employees' assessment of the effect of the child care on their job performance.

Cross tabulations of selected characteristics of the child care services themselves with different dependent variables had similar outcomes. Employees with annual family incomes below $26,000 using below market cost child care services were no more likely to respond that the availability of the child care service influenced their decision to continue employment than were those with incomes above $26,000. Similarly there was no relationship demonstrated between the child care serving or not serving infants and toddlers and the users ever having recommended their employer to others because of the child care service.

Discussion

Based on the optional comments of employees (reported below) and the significant relationships found for the dependent variables (reported above), several supplemental analyses were undertaken. Employee comments on single parenthood suggested the possibility of a relationship between this factor and various dependent variables. Similarly, employee comments on the cost of child care and on the value of infant care indicated the existence of additional relationships. None were found.

EMPLOYEE COMMENTS

Of the 311 questionnaires received, 301 of them included an additional sheet with the heading "Is there anything else you'd like to add"? for optional remarks. Comments were provided by 161 of the respondees, a response rate of fifty-three percent.

Of those providing additional comments more than eighty percent were of a positive nature although approximately one-fourth of these included qualifying statements. These favorable comments most frequently mentioned the high quality of the child care services. The range of skills their child had learned was highlighted by many, as was the progress made in many social/emotional areas. A number of the mothers favorably compared their current employer supported child care service with other child care programs they had previously used. They remarked on the well planned programs and the value of a consistent, reliable service which some had not experienced in prior used day care.

Many respondents related that having their child nearby while they worked was very comforting and extremely valuable to them. Specifically voiced was the real importance and pleasure of being able to continue to breast feed one's child when utilizing a worksite center. The proximity of their child was elaborated by mothers as stress and anxiety reducing, particularly in regard to being nearby should the child become ill or injured. Many specified the enjoyment they received by being able to spend time with their child during lunch or breaks. Some subjects felt that the child care service was the most important benefit that their company provided and indicated a real pride in working for an employer with such values and priorities.

A number of respondents stated that the child care service provided by their employer was a major reason or sometimes the main reason for their continued employment. Mention was made of rejecting higher paying positions due to the necessity of having to forfeit this child care benefit. Those respondents that either qualified their positive remarks (20%) or provided wholly negative comments (18%) mentioned the hardship of child care costs, the limitation of services, poor quality service or the desire for child care located at their worksite.

Of those unhappy with the costs, some actually specified they planned to remove their child from the program due to the hardship of the finances. Other comments highlighted the notion that the cost should be reduced if the employee had two children utilizing the child care program or that an employee should not have to pay for full-time use of the program if her child only attended part-time. Others felt that costs should be subsidized for lower-income employees.

Dissatisfaction with the service often was a result of the hours of operation of the child care service. Mostly these comments were from hospital employees who worked rotating shifts but the child care operated only daytime hours. Others noted the lack of a full-time kindergarten or the need for after school care.

Proportionately and numerically, more negative comments were received from users of information and referral services than from users of the other child care services. A number of I&R users mentioned the very limited benefit of this type of employer assistance and voiced a desire that their company provide an actual child care program. Others noted that the I&R service was ineffective in helping meet their child care needs.

Discussion

The unsolicited testimony of satisfied users of one's services is standard marketing technique. As such, the comments volunteered by user employees provide strong substantiation of the view that access to child care proximal to the worksite is a highly valued benefit. The conflicts and anxieties experienced by working mothers as to their children's care have been well reported. In contrast, study respondents repeatedly took the opportunity to express appreciation and gratitude that their employer had relieved them of these worries. In an extension of this, several respondents described at length the positive effects attendance at the child care center had on their child.

It is worth noting that negative comments among users of on-site and off-site services primarily focused on the need for an extension of the service or displeasure with the cost of service rather than dissatisfaction with the existing service. Almost never did these employees express dissatisfaction with the child care itself. Employees who used information and referral services as a rule did not have as positive feelings about the service or about their employer for providing it. (Selected employee comments can be found in Appendix K.)

IV. IMPLICATIONS AND SUMMATION

This study has provided long awaited data on some of the effects of employer supported child care services. This information is based on an analysis of one year of attendance data for approximately 800 female employees and on questionnaire responses of over 300 women who used their employers' child care support systems. Some conclusions can clearly be drawn from the analysis of the data which will be useful both to those currently entrenched in the corporate child care field and those pursuing entrance into the area. Several factors, however, indicate a degree of caution should be exercised in interpreting study findings.

The scope of this project limited solicitation of eligible companies and hospitals to those in the midwestern and northeastern states. With the exception of a very few hospitals, all employers within the target states which supported an on-site child care service were asked to participate in the study. And all the seemingly eligible employers operating either off-site or information and referral programs were solicited. Within these geographic constraints employers participating in this study were self selected.

As has been noted earlier in this report, many companies had to be eliminated from the study due to inadequate numbers of continuous female users. And because of the small numbers of eligible subjects in some participating companies, certain analyses were restricted or not possible. Despite these caveats, this study represents the most thorough investigation to date of the effects of employer sponsored child care services on the behaviors of employees.

STUDY IMPLICATIONS

Certain findings of this study impact on widely publicized claims of proponents for increasing the role of business in providing child care services for working parents. In the sections below we have addressed the implications of some of the principal findings of this study, namely the effects of different employer supported child care services on: absenteeism, recruitment, turnover, employee morale and productivity.

Absenteeism

One of the key factors analyzed by this study was the effect of employer supported child care on employee's absenteeism. As a result of gathering year long attendance data on three hundred and eleven users of these child care services and comparing this data both with internal non-users and with potential users in companies not currently providing child care, the findings do not indicate that absenteeism is significantly affected. In fact, based on this analysis, no conclusions can be drawn as to the relationship between absenteeism and type of child care service.

Speculation on the reasons for this lack of impact include the fact that many mothers are absent from work when their child is sick irrespective of the type of child care being used. Since few child care arrangements include care of sick children, if a child becomes ill what options does the parent have for care of the child? In the past women were much more likely to have extended family nearby who could provide various types of assistance for a mother who combined the roles of work and parenthood. These days it is more common for women to live away from their family or for other family members to be working. There are more single mothers which means that not only husbands but in-law relatives are not available.

The data on employee absenteeism were further clouded by variations and inconsistencies in employer records of employee absences. The use of retroactive data provided no opportunity for classifying data other than as recorded by the employer. A longitudinal study which allowed for the identification of the reason for each day of employee absence could possibly correct for this. But possible gains in this aspect could well be offset by the confounding effects of employee and supervisory sensitivity to a scrutiny of absenteeism.

Although the results of this study do not settle ths issue, it appears unlikely that with the large number of uncontrollable variables and the relatively small proportion of the workforce affected a statistical relationship can be demonstrated between absenteeism and employers providing child care services. While seemingly realistic, this conclusion may not be easily accepted by those who have long touted a reduction in absenteeism as a rationale for employer supported child care services. And yet not all proponents of corporate involvement have expected absenteeism to be affected. A number of corporations currently supporting child care services have specifically not included changes in absenteeism among their expected benefits. Continued insistence on unrealizable or, at best, unsubstantiated benefits can only hinder the proliferation of employer supported child care.

Recruitment

An expectation frequently voiced by employers initiating a child care service is that it will positively affect their recruitment efforts. The findings of this study provide strong corroboration of this expectation. A significant number of employees responded that the availability of the near worksite child care service was a factor in their acceptance of employment. For companies which compete within a tight labor market the implications of these findings are obvious. Not only will support for a child care service enhance the likelihood that employees with young children will accept employment, it also increases the likelihood that, once employed, they will encourage their peers to seek similar employment.

Turnover

The findings of this study illustrate that when employers sponsor either an on-site or an off-site child care service for their employees a significant reduction in turnover occurs. In more than half the companies and hospitals turnover of employees utilizing the employer supported child care service was reduced to zero; in several others it was less than fifty percent that of the company turnover rate.

In addition, a statistical relationship was found between employee reports of the effect of child care on continued employment and the type of child care provided. These results strongly buttress the reduced turnover findings. Also, comments provided by some child care users reflected a very conscious decision to remain with their current employer to maintain the child care benefit. Higher paying positions were even declined by some since child care was not sponsored by the other employer. It should be noted that this is not the case when the employer only supports an information and referral service.

Employee Morale and Attitudes

The recipients of corporate supported child care who participated in this study have given ample testimony as to how these services have impacted on their attitudes toward work and their employer. They clearly experience more positive feelings toward their company in two areas; first, they tend to be specifically grateful that their firm is assisting in meeting their child care needs, and secondly, they view their employer as humanistic and committed to people needs. The fulfillment of child care needs in a satisfactory manner eases the guilt female employees often have about working, greatly reduces concerns about children's welfare, and as a result, allows women to work more effectively and productively. Whether women are working based on financial need or self-fulfillment reasons, concern for the well-being of their children during working hours is of paramount importance. Since employer assistance often provides a financial decrease in child care expenses, parents also express pleasure at this reduced financial burden.

These employer commitments to parent's needs signify to employees a sensitive mindset about priorities. Employees recognize these values and in turn are proud of their company, speak well of their firm and even encourage others to come to work there.

Productivity

A not infrequently voiced objective of employers is the need to increase the level of productivity of their employees. Techniques for the measurement of employee output vary from business to business. Despite diversity in approaches, most employers would consider employee stability a key factor in the firm's production levels. Similarly, most would consider production positively impacted by employees who are committed to their job and who have positive feelings toward the company.

The results of this study demonstrate a strong relationship between a near worksite child care service and the employment longevity of the employees who use that service. Study findings show that the availability of the child care service positively affects acceptance and continuance of employment. They also demonstrate that for a significant number of employees a positive relationship exists between the child care service and their perceived job performance.

And while not the result of statistical analysis, the voluntarily supplied comments by many of the respondents testify to the positive impact an employer supported child care service can have on employee morale and attitude. Conversion of these kinds of employee attitudes into increased productivity is a logical supposition. It will, however, remain the prerogative of the employer to place a value on the relationship between improved employee morale and production figures.

What is now needed is a demonstration of how study findings can be translated into actual cost reductions in corporations. According to Sandra Burud (BNA, 1984, p. 7), director of the National Employer-Supported Child Care Project, few firms have done cost-benefit analyses of their own child care support programs. It is unfortunate that other companies are not privy to information on their positive effects. It can be assumed that other employers would be more likely to initiate a child care assistance program if they could anticipate actual cost benefits.

RELATED ISSUES

In addition to the specific conclusions formulated, the study raises other areas of consideration and potential future research issues. Three of these are expanded upon in the following sections:

- The impact of information and referral services;
- The various limitations in the use or availability of child care services; and
- The relationship between the provision of child care services and the public image of corporations.

The Impact of Information and Referral Services

It is widely recognized that many working parents have difficulty locating appropriate satisfactory child care. In the past many of these parents have had no resource for obtaining assistance with this difficulty. The creation of the child care information and referral services has helped to minimize these frustrations. Each I&R program is unique in its structure, operation and specific services provided. Some merely offer objective information on child care availability, some also provide qualitative remarks about services. Some maintain statistics only on particular types of child care, while others list all services within a given geographic area. Some avoid the issue of adequacy of service but others are evaluating and training child care staff to upgrade quality. Some are selective in their listings, while others are all inclusive.

The wide diversity in services provided complicates any attempts to assess the effectiveness of I&R services. In concept, the services clearly serve a very valuable purpose. In reality, however, all are not meeting the needs of their clients. A number of I&R users noted that the information and referral program was not helpful to them in locating appropriate child care. Some parents, for example, were seeking in-home care but the service only listed center-based child care. Other employees contacted the employer supported I&R service only to learn that it did not cover the county in which they lived.

Based on the information gathered in the study, employers that only support an information and referral service for their employees should be in a separate category from those with worksite or near worksite services. The provision of I&R is of an entirely different caliber. I&R has no impact on offsetting employee's child care costs, and more importantly, has no impact on the existing shortage of child care services. In addition, a corporation gains no managerial benefits from this service; longevity of employment is not affected, recruitment is not improved, and morale does not noticeably change.

While the I&R services are intrinsically worthwhile and fulfill an important function in the communities they serve, they are truly valuable only in conjunction with the other pieces. Those employers supporting an information and referral service have been able to attend to the child care issue at minimum cost to the firm. It is important to view these activities within the perspective of the total continuum of child care issues and needs. In a recent analysis of industry-sponsored child care LaMarre and Thompson (1984) state that the increased interest by industry in I&R services ". .is at best a Band-Aid solution to the bigger problem - the lack of existing day care slots for current demand levels and future predictions of demand (p. 64)." If the child care needs of our working parents are to be satisfied, advances must continue to be made in increasing the number of slots and in decreasing the costs to individuals.

Child Care Service Limitations

It is a truism often stated by proponents of employer supported child care that parents should be able to choose their preferred model of child care. Comments of some of the study respondents indicate this is not always possible. When an employer contracts with an external provider, employees either use that provider or lose the benefit of the child care service. Employers who operate a near worksite day care center often, due to space limitations, cannot accomodate all applicant employees. Other employees, particularly in single income families, sometimes have to discontinue using the employer's service because of cost factors. Frequently the day care service does not accomodate infants or school age children, or it does not provide care during evening or weekend shifts.

Solutions to these issues are not readily apparent; nor should statement of them be seen as critical of employers who offer child care services. Yet, if employers are truly to have an impact in this field, consideration needs to be given to providing services which match employee needs.

Public Image Issue

Aside from personnel effects, one of the perceived benefits to an employer in return for support of a child care service is an enhanced public image. Media attention to the issue of employer supported child care has developed what amounts to a folk history of companies who have pioneered in this field. However, in researching these firms for possible inclusion in this study, a number which had received notable public attention for their child care involvement, on closer examination, revealed that an extremely small percentage of their employees were actually benefiting from the services. In fact, in some cases this number was miniscule in relation to the total number of employees. Yet the public relations effect of their corporate child care investment has been quite substantial.

Similarly, some firms that have contracted with external providers for child care have expended very limited amounts of money to acquire those services. Irrespective of the child care costs, most of these employers have been receiving public notoriety and an enhanced public image for their commitment to child care for their employees. Yet in other cases almost the reverse situation exists. There are companies and hospitals which, while serving relatively large percentages of their employees, have received little public notice for their child care service. This results in a skewed effect on developing a clear picture of the extent of employer supported child care and of the degree of support it is receiving from the corporate world.

SUMMATION

Employers desiring to provide support for child care services can choose from a variety of options. The level of service of these options ranges from personnel policy changes which allow employer-parents more flexible work arrangements to establishing and operating a worksite day care center. Many of these, while indicative of humanistic concerns of management, have not been shown to effect employer personnel costs. Findings of this study support the hypothesis that provision of on-site or off-site child care services can result in significant cost reduction benefits for the employer.

The availability of child care has notably not kept pace with the increased need for child care. Many support the notion that employers have a role to play in helping to fill this gap. This study provides some clear evidence that employers' involvement in child care can have a clear dual benefit. Their support can help families as it creates new child care spaces and/or reduces the employee costs for those spaces. At the same time these efforts can provide the company with cost and efficiency savings by reducing employee personnel costs. A future research effort that would greatly supplement these conclusions would involve determining the actual monetary savings to categories of employers based on increased employee retention.

When considering child care in the United States, it seems necessary to review and understand the role of the government both currently and potentially in these activities. One means by which the field of employer supported child care has received clear cut support from the government is through implementation of various tax incentives. This message from the public sector reflects a commitment to both employers and employees in developing ways to support family needs. Pragmatically the government has demonstrated this commitment through initiation of child care services for some of its own employees.

Up to now, the federal government has demonstrated its willingness to generate information on the state of the art of employer involvement in child care. This has included funding the National Employer Supported Child Care Project, this study and a variety of other activities. The government is to be commended for these efforts and on its insight into the need for public/private partnerships. Future advancements in the field call for the continuation of these public supports in conjunction with private and voluntary contributions.

As an example, the list prepared by the National Employer-Supported Child Care Project, published in 1982, is already out of date. This listing of most companies in the country providing a form of child care service for its employees is useful to many activists in this field. Employers considering initiating a service can refer to the list to locate currently involved firms in their labor market or geographic area. It is hoped that a way will be found to accomplish revision of this listing.

Clearly, the government has also identified it has a role in disseminating information on the realm of corporate child care. The Office of Private Sector Initiatives, particularly, has been actively engaged in the spread of information as have other groups and agencies. To have the far reaching impact desired by all proponents of corporate child care, dissemination of these study findings must extend beyond what can be accomplished through the project itself. It is desired and anticipated that various governmental groups will continue to play a role in dissemination and consequently will help in accomplishing this.

In recent years interest and investment in corporate child care have expanded. Both the federal government and other institutions are fast becoming storehouses of extensive materials on employer-supported child care. There is as yet no easy way to locate much of this material. Perhaps a system can be developed whereby interested parties could both be made aware of the location of and the means of obtaining desired information.

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APPENDIX A

SUPPLEMENTAL INFORMATION ON CHILD CARE SERVICES SPONSORED BY EMPLOYERS

No. of Years Service Had Operated Prior to Beginning of Study Year
(n=29)

	On-Site*	Off-Site**	I&R
< 2 Years	7	2	8
2-5 Years	1	4	
> 5 Years	4	3	

* Range: 5 months - 37 Years
** Range: 2 months - 10 Years

Employee Costs for Child Care Services
(n=29)

	On-Site (n=12)	Off-Site (n=9)	I&R (n=8)
Fees comparable to community	2	2	
Reduced fees for all	9	6	
Reduced fees based on employee income		1	
No charge	1		8

Information on Funding
(n=29)

Start up funding by employer:

Yes: n=19
No: n=10

On going support by employer:

Yes: n=27
No: n=2

Characteristics of I&R Services
(n=8)

Contractual arrangements

Employer had contract with I & R service:	n=6
Employer had agreement with I & R service:	n=2
Employer operated entire program:	n=0

Employee counseling

Counseling provided by I & R service:	n=5
Counseling provided by employer:	n=3

Ownership/Operating Responsibility of Service

	On-Site (n=12)	Off-Site (n=9)
Employer owned/employer operated	10	6*
Employer owned/externally operated - local provider	1	
Employer owned/externally operated - national provider	1	
Externally owned/externally operated - local provider		1**
Externally owned/externally operated - national provider		2**

* includes one voucher program
** vendor programs

Characteristics of On-site and Off-site Child Care Services (n=20)

Location of child care services:

within worksite:	n=4
less than one block from worksite:	n=8
one mile or less from worksite:	n=5
more than one mile from worksite:	n=3

Single vs. multiple site services:

single site services:	n=18
multiple site services:	n=2

Number of employees served:

less than 50:	n=9
50 -< 100:	n=7
100 or more:	n=4

Child Care service serves employees only:

Yes:	n=5
No:	n=15

Waiting list for child care service:

Yes:	n=14
No:	n=6

Capacity of child care centers:

center served less than 100 children: n=12

center served 100 to 200 children: n=5

center served more than 200 children: n=3

Number of days service provided:

5 week days: n=15

5 week days plus Saturday: n=2

5 week days plus Saturday and Sunday: n=3

Hours of operation:

9 - 12 hours per day: n=15

18 - 24 hours per day: n=5

Groups of children served:

less than one-year-old: n=16

one- to two-years-old: n=16

two- to five-years-old: n=20

five- to six-years-old: n=18

after school care for school age children: n=8

sick children: n=0

APPENDIX B

STUDY MANUAL

Study of

Employer Sponsored Child Care Services

STUDY MANUAL

March 23, 1983

Study Design

We will be obtaining data on individual employees from four categories of companies:

E1 Those providing on-site child care service
E2 Those providing off-site subsidized child care service
E3 Those providing information and referral
E4 Control group: Companies which do not provide any child care services at this time.

- We will systematically select two groups of employees in each company - users and non-users of the child care services.
- These groups will be of equal size within companies and across companies.
- The same number of companies will be selected in each category.
- The preferred design with ten companies in each category and ten subjects in each group is shown below.
- Alternatively, we may have to use fewer companies and increase the number of subjects in each company.

Experimental Group 1		Experimental Group 2		Experimental Group 3		Control/Experimental Group 4	
users	non-users	users	non-users	users	non-users	potential users	non-users
C1 n=10	n=10	C11 n=10	n=10	C21 n=10	n=10	C31 n=10	n=10
C2 n=10	n=10	"		"		"	
C3 n=10		"		"		"	
"		"		"		"	
"		"		"		"	
"		"		"		"	
"		"		"		"	
"		"		"		"	
"		"		"		"	
C10 n=10	n=10	C20 n=10	n=10	C30 n=10	n=10	C40 n=10	n=10
Total n; 100	100	100	100	100	100	100	100

Selection of Subject Employees

We will be gathering data on two groups of employees of participating firms which sponsor child care services: employees who use the child care service (user employees); and employees who do not use the services (non-user employees). The members of each group will be selected at random from a pool of employees who meet certain criteria (See pool of user employees and pool of non-user employees).

Procedures for defining the pool of user employees:

Step 1: Obtain list of all employees who were using the child care services at the beginning of the study year.*

Step 2: Obtain list of all employees using the child care services at the end of the study year.

Step 3: Identify and eliminate everyone not on both lists. A sub step of this step will be to identify all terminated employees on the first list. See Termination Data.

Step 4: Identify and eliminate male users.

You now have your pool of user employees.

Step 5: Alphabetize them and

Step 6: Number them consecutively

Step 7: Determine your sampling interval.

Addendum -

* sometimes companies with information and referral services do not keep records of users - but the I & R service does keep records. In this case a list of names of users from each company will be obtained from the I & R service and the sample drawn. The questionnaire and consent form will be distributed directly to the employees or preferably through the employer.

Selection of User Group plus Replacement Group

Obtaining the samples of subject employees in each company will involve first drawing a group comprising the sample plus the replacement group. The replacement subjects will be selected out of this larger group leaving the sample subjects. That is, to obtain a user group of n=15 we will select a sample of 20 from the pool of user employees; and then select out 5 of these for the replacement subjects.

Procedures for selecting User Group plus Replacement Group

Step 1: Randomly select a starting point from your first sampling interval. This is the first number of your group. Enter this subject in the number one slot of your user group plus replacement group form.

Step 2: Select every kth* member until you have your full sample plus replacement group. List each subject consecutively on form.

Step 3: Select out the replacement group subjects using the same system. That is to select out 5 replacements from a group of 20, use a sampling interval (k) of 4. Randomly determine your starting point as above. Identify each replacement subject in the appropriate column. Those not selected out comprise your user group.

Step 4: Questionnaire Packets will be distributed to all members of the User Group plus Replacement Group. Replacement group returns will be used only if needed to replace members of the user group who do not return both questionnaire and consent form.

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* See Systematic Selection

Procedures for Distribution and Collection of Questionnaire Packets

One of your main tasks will be to develop a mutually acceptable procedure with the employer for the distribution and collection of the questionnaires. The steps below outline our preferred procedure.

Step 1: Study staff will provide questionnaire packets for each member of User Group plus Replacement Group to Employer Contact.

Step 2: Employer will insert letter to employees in packet and distribute to employees at work or at day care center.

Alternate A: CCC Coordinator could distribute packets or assist in the process in any way desired.

Alternate B: Packet can be mailed to employees. This is not the preferred procedure.

Step 3: Employees will complete questionnaire and sign consent form and place in separate envelopes.

Step 4: Employee will return both envelopes to employer.

Alternate A: Employer can then give us both envelopes

Alternate B: Employer can keep consent form (which will have employees name on it) and give us unopened questionnaire envelope.

Alternate C: Employee can mail both envelopes to us.

Step 5: Employer will be asked to request non-respondents to return both forms.

Step 6: Final composition of user group will be established from respondents. See Step 4, Procedures for Selecting User Group plus Replacement Group.

Defining the Pool of Non-User Employees

The population of non-user employees comprises all employees who do not use the child care service. For purposes of this study, however, it will be limited to those non-user employees who work at the same work site as the user employees. If this group is a reasonable number (≤ 200) we will use the whole group as a base. Otherwise, practical considerations dictate that we select a pool of non-user employees from which to draw our study group.

Procedures for Defining the Pool of Non-User Employees

Step 1: Determine how many employees are at this location.

Step 2: Using the procedures described above select a sampling interval that will enable you to obtain approximately 200 employees.

Step 3: Determine how the company lists employees (alphabetical, employee number, social security number, etc.)

Step 4: Develop a procedure with the company for the systematic selection of 200 of these employees. It is important here that we get a chance selection of employees. If employee numbers are related to length of employment this may skew sample. Job classification lists may have a similar result. Preferably the company will be able to alphabetize the list and select every kth* person.

Step 5: If possible, have company select out male employees.

Step 6: If possible, have company select out employees who do not have young children. (This is unlikely, but possible).

Step 7: Consent forms will be distributed to each of these ** non-user employees. In addition to agreeing to participate in the study, respondees will answer questions as to their length of employment, their sex, and the ages of their children. The Pool of Non-User Employees will comprise those employees who:

- return consent forms;
- are female;
- do not have children aged 1-6, and
- have been employed during the entire study year.

* See Systematic Selection

** If company does not want to obtain employee consent forms move to Selection of Non-User Group Step 1.

Step 8: Develop a procedure with the employer for the distribution and collection of the consent forms. Preferably this will be done by the employer.

Step 9: Those non-user employees who return consent forms and who meet the selection criteria will comprise the Pool of Non-User Employees.

Selection of Non-User Group

Step 1: Alphabetize and number consecutively the pool of non-user employees.

Step 2: Using the procedures described in selection of User Group plus Replacement Group, systematically select a non-user group equal to the user group. Note: Replacement subjects will not be needed since consent forms have already been received.

Step 3: Attendance data will be collected for each member of the Non-User Group.

Attendance Data Needed

We are interested in the actual attendance at work in relation to the scheduled attendance and the reasons for non-attendance. The list below is illustrative only. A data collection form will be used to record the information.

1. Total days each subject employee was scheduled to work during study year.

   (If this total includes vacation or other non-work days please identify number in each category).

2. Total paid days each subject employee was absent during study year and reasons.

   ___ scheduled paid vacation
   ___ paid personal days
   ___ paid sick days
   ___ paid sick leave

3. Total unpaid days each subject employee was absent during study year and reasons. These include:

   ___ sporadic single days
   ___ planned leave
   ___ unpaid sick days
   ___ other

Obtaining Attendance Data

This information is needed for each member of the user group and of the non-user group. You will need to explore with the Employer Contact the kind of data available, the manner in which it is stored, its retrievability, etc. Your role in this process will need to be defined. You will, also, need to explore issues related to time and cost required to obtain the data. As a last resort only, it is possible for us to pay someone to assist in this process. This someone can be a company employee working overtime or a temporary hired for this specific task. Dont' bring this up unless it seems to be the only solution. Obviously, before you commit project resources you need to clear this with Irving or Ann.

Aggregate data whether for an individual or group of employees will not be useable. If this is the only solution the employer offers you, try to identify the reason. Sometimes employers change when they realize the small number of employees for whom we will need information. Or the issue may be a desire to preserve employee anonymity or the need to obtain employee consent. Both of these issues are covered by federal law and procedures will be followed to ensure compliance. Your job will be to reassure the employer.

Termination Data

This data will be gathered differently from the attendance data and actually will not be experimental data. Nevertheless, it should add another dimension to the study. Please also refer to Procedures for Identification of Pool of User Employees.

1. For any user employee who terminated employment at company during study year, data needed:
    - job category of user employee
    - date user employee terminated
    - reason (if known) for termination

      at company initiative
      at employee initiative
2. Company data on turnover rate of permanent (non-probationary) employees.
    - for all employees
    - for sub sets of employees.

Company Aggregate Attendance Data

Please also request any company attendance data. Identify the employees exempt/non-exempt; total company; study site only and the time period.

DEFINITION OF TERMS

Study

DHHS has funded us to conduct an experimental study of the effects of employee sponsored child care services on employee behaviors.

Study year

The one year period beginning May, 1982 - May, 1983. The actual anniversary date will be selected with the company to coincide with company record keeping system.

User employees

Data will be collected on two groups of employees in each firm. One of these groups will be employees who use the child care service -- (the user group).

Non-user employees

Data will be collected on two groups of employees in each firm. The second of these groups will be employees who do not use the services -- (the non-user group).

Pool of user employees

The pool of employees from which the user group will be drawn will be composed of employees who:

- were using the child care services for the duration of the study year;*
- have a 1-6 year old child at the end of the study year;
- were employed by the firm for the duration of the study year, and *
- are female.

Pool of non-user employees

The pool of employees from which the non-user group will be drawn will be composed of employees who:

- were employed by the firm for the duration of the study year;*
- do not have a 1-6 year old child at the end of the study year;
- consequently, have not used the child care services, and
- are female.

* This includes those employees who were laid off and recalled during the study year.

User group

The members of this group will be selected from the pool of user employees. It is these employees who will receive the questionnaire and for whom we will want personnel data.

Non-user group

The members of this group will be selected from a pool of non-user employees. We will be collecting personnel data only for these employees.

Subject employees

All those employees included in the two study groups:

- the user group, and
- the non-user group.

Subject numbers

A number will be assigned to each subject to protect the identity of the subject while enabling us to match personnel data with data obtained from the questionnaire.

Sampling procedure

We will be using a sampling procedure called "Systematic Selection". This procedure has been selected as the most effective way of selecting the controls (non-user group) in each company and will be used as well to select the experimental subjects (user group). A relatively clear textbook description of Systematic Selection is included.

Sampling interval

This is the number you will use in drawing your samples. This interval will be obtained by dividing the total number in your pool of employees by the number needed for your sample. This interval is known as k. See Systematic Selection for a more thorough explanation.

Study Questionnaires

The study questionnaire has been designed to gather demographic and other factual data from the user group only. The questionnaire is printed on two sides of one sheet of paper. It will be identified only by a subject number. There are three versions of the questionnaire: one for each category of employer sponsored child care service. All subjects at one site will receive the same form of the questionnaire dependent upon the kind of service the employer provides.

Questionnaire Packets

Questionnaire packets will be distributed to all members of the User Group plus Replacement Group. Each packet will consist of:

- one questionnaire with subject number on it;
- one questionnaire envelope with subject number on it;
- one consent form;
- one envelope for consent form with subject number on it;
- letter from study;
- letter from employer, and
- everything will be color coded.

Questionnaires and consent forms returned by Replacement group members will be used only if needed to replace non-consenting members of User Group.

Systematic Selection*

A systematic sample is one in which every kth item (e.g., every 10th item) is selected in a list representing a population or a stratum (a relatively uniform segment) of the population. The number k is called the sampling interval. The first number is chosen at random from the first k items, as described below. Systematic selection ensures that the items sampled will be spaced evenly throughout the population.

For example, suppose you wish to take a systematic sample of 6 households from a block of 78 households. First, list and number the households. Then divide 6 into 78; this means that you should select every 13th house. Choose the first household at random from the numbers 1 through 13, using a table of random numbers. Say this is number 6. Now select every 13th house, beginning with number 6--that is, 6, 19, 32, 45, 58, and 71--to complete the sample.

Systematic sampling is often equivalent in its results to random sampling, if the elements in the population occur in a random order. For example, in dealing cards in the game of bridge, each player has a systematic sample (every fourth card). If the cards are shuffled well before the deal, the hand is equivalent to a random sample. Where the elements in the population are considered in random order, the formulas used for simple random sampling apply also to systematic sampling.

Systematic selection has an important advantage over simple random sampling if similar parts of the population tend to be grouped together, that is, if nearby elements resemble each other more than they resemble those at greater distances. For example, residents with similar incomes tend to be located in the same neighborhoods. A systematic selection of a city's blocks, numbered in serpentine fashion as described below, would then include more nearly the same proportion of each income group than a simple random sample.

Systematic sampling has come into widespread use because it is easy to apply and it usually yields good results. For example, in the 1970 census of population every 20th person was asked several supplementary questions on various subjects. The cost of collecting and compiling information for this 5 percent sample was small compared with that of a complete enumeration or of an independent 5 percent sample survey. At the same time, the reliability of the information was sufficient for almost any purpose.

---

* Spurr, W. and Bonini, C., Statistical Analysis for Business Decisions. Homewood, Illinois: Richard Irwin, 1973, 332-3.

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1-9

APPENDIX C

STUDY QUESTIONNAIRES

EMPLOYEE QUESTIONNAIRE

Thank you very much for spending the time to fill in this questionnaire. These answers will provide valuable information on day care arrangements used by working parents. Your individual answers will remain confidential.

Part 1: Your Family and Household

1. Number of adults (persons 18 and older) in your household. ____ 10-11

2. Check the statement below which most nearly describes your family structure.

single parent living alone with child(ren) ____ 12
single parent living alone with child(ren) and other adult(s) ____ 13
married parent living with spouse and child(ren) ____ 14
married parent living with spouse, child(ren), and other adult(s) ____ 15
other: (specify) ________________ ____ 16

3. Please indicate below the number of children you have in each age group:

less than 1 year old ____ 17
1 to less than 2 years old ____ 18
2 to less than 5 years old ____ 19
5-6 years old ____ 20
7-13 years old ____ 21
14-18 years old ____ 22

4. How many children do you have who are regularly cared for by a friend or relative while you work? ____ 23
Please give their ages. ____ 24 ____ 27
____ 25 ____ 28
____ 26 ____ 29

5. How many children do you have who are regularly cared for in a day care home while you work? ____ 30
Please give their ages. ____ 31 ____ 34
____ 32 ____ 35
____ 33 ____ 36

6. How many children do you have who are regularly cared for in a child care program while you work? ____ 37
Please give their ages. ____ 38 ____ 41
____ 39 ____ 42
____ 40 ____ 43

7. The child care I use is (check all that apply)

in my home ____ 44
in my neighborhood ____ 45
on my way to work ____ 46
out of the way to home or work ____ 47
at my work site ____ 48

8. All of my out of home child care is:

in the same place ____ 49
in several places near each other ____ 50
in several places far from each other ____ 51

Part 2: The Child Care Service Provided by Your Employer

A day care center is provided for children of employees where you work. The questions in Part 2 relate to this service.

9. Were you informed of the availability of this child care service when you first began your employment here?

Yes ____ 52
No, not informed ____ 53
No, service not available when first employed ____ 54

10. If yes, did the availability of this service influence your decision to accept this employment?

Yes ____ 55
No ____ 56

11. Are you now using this service?

Yes ____ 57
No ____ 58

12. If yes, have you used this service:

less than 12 months ____ 59
12-24 months ____ 60
more than 24 months ____ 61

13. Please indicate below the number of children you have who use the child care services provided by your employer.

less than 1 year old ____ 62
1 to less than 2 years old ____ 63
2 to less than 5 years old ____ 64
5-6 years old ____ 65
older than 6 years ____ 66

14. Does the availability of this child care service influence your decision to continue your present employment?

Yes ____ 67
No ____ 68

15. Did the availability of this child care service enable you to shorten your maternity leave?

Yes ____ 69
No ____ 70
Not Applicable ____ 71

Please complete the questions on the back of this page before returning your questionnaire.

Thank you.

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Part 2: The Child Care Service Provided by Your Employer (continued)

16. Have you ever recommended your employer to others because of the availability of the child care services?

Yes ______10
No ______11

17. Has this child care service made it possible for you to work overtime or odd hour shifts?

Yes ______12
No ______13
Not Applicable ______14

18. Has this child care service made it possible for you to accept a promotion or new position?

Yes ______15
No ______16
Not Applicable ______17

19. The child care services available through my employer have:

little or no effect on the way I do my job ______18
a somewhat positive effect on the way I do my job ______19
a very positive effect on the way I do my job. ______20

Part 3: Yourself

20. Are you: male ______21
female ______22

21. How old are you? ______23-24

22. How far did you go in school?

8th grade or less ______25
Some high school ______26
High school graduate ______27
2 years after high school ______28
4 years of college ______29
Graduate or Professional study ______30

23. Check the reason which most closely describes your reason for working.

I am the main support for my family. ______31
My family needs more than one income. ______32
It is important for me to work even though my income is not essential. ______33

Part 4: Your Work

24. What is your job title?

________________________________34-35

25. How long have you worked for this company?

________________________________36-37

Part 4: Your Work (continued)

26. How many hours per week do you usually work?

Under 30 ______38
30-40 ______39
Over 40 ______40

27. Do you receive additional pay for overtime hours?

Yes ______41
No ______42

28. What is your income before deductions? (Use whichever column is easiest)

ANNUALLY		WEEKLY	
Under $10,000	______	Under $200	______43
$10,000 - 18,000	______	$200 - 350	______44
$18,001 - 26,000	______	$351 - 500	______45
$26,001 - 35,000	______	$501 - 700	______46
Over $35,000	______	Over $700	______47

29. What is your household's income before deductions? (Use whichever column is easiest)

ANNUALLY		WEEKLY	
Under $10,000	______	Under $200	______48
$10,000 - 18,000	______	$200 - 350	______49
$18,001 - 26,000	______	$351 - 500	______50
$26,001 - 35,000	______	$501 - 700	______51
Over $35,000	______	Over $700	______52

30. How long does it take you to go to work?

Under 1/2 hour ______53
1/2 hour to 1 hour ______54
Over 1 hour ______55

31. Which of the following do you usually use to go to work?

public transportation ______56
company transportation ______57
car pool ______58
family car ______59
walk/bicycle ______60

32. Do you usually work:

Days ______61
Evenings ______62
Midnight Shift ______63
Rotate among shifts ______64

33. In the last 4 weeks, how many days have you missed work? ______65-66
(days)

Is this about usual ______67
More than usual ______68
Less than usual ______69

34. In the last 4 weeks, how many times have you been late for work? ______70-71
(times)

Is this about usual ______72
More than usual ______73
Less than usual ______74

2 /__ __/__ __/__ __ __ __/
1-9

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EMPLOYEE QUESTIONNAIRE

Thank you very much for spending the time to fill in this questionnaire. These answers will provide valuable information on day care arrangements used by working parents. Your individual answers will remain confidential.

Part 1: Your Family and Household

1. Number of adults (persons 18 and older) in your household. _____10-11

2. Check the statement below which most nearly describes your family structure.

single parent living alone with child(ren) _____12
single parent living alone with child(ren) and other adult(s) _____13
married parent living with spouse and child(ren) _____14
married parent living with spouse, child(ren), and other adult(s) _____15
other: (specify) ________________
______________________________ _____16

3. Please indicate below the number of children you have in each age group:

less than 1 year old _____17
1 to less than 2 years old _____18
2 to less than 5 years old _____19
5-6 years old _____20
7-13 years old _____21
14-18 years old _____22

4. How many children do you have who are regularly cared for by a friend or relative while you work? _____23
Please give their ages. _____24 _____27
_____25 _____28
_____26 _____29

5. How many children do you have who are regularly cared for in a day care home while you work? _____30
Please give their ages. _____31 _____34
_____32 _____35
_____33 _____36

6. How many children do you have who are regularly cared for in a child care program while you work? _____37
Please give their ages. _____38 _____41
_____39 _____42
_____40 _____43

7. The child care I use is (check all that apply)

in my home _____44
in my neighborhood _____45
on my way to work _____46
out of the way to home or work _____47
at my work site _____48

8. All of my out of home child care is:

in the same place _____49
in several places near each other _____50
in several places far from each other _____51

Part 2: The Child Care Service Provided by Your Employer

> Your employer provides some support for the child care services used by employees. The questions in Part 2 relate to this service.

9. Were you informed of the availability of this child care service when you first began your employment here?

Yes _____52
No, not informed _____53
No, service not available when first employed _____54

10. If yes, did the availability of this service influence your decision to accept this employment?

Yes _____55
No _____56

11. Are you now using this service?

Yes _____57
No _____58

12. If yes, have you used this service:

less than 12 months _____59
12-24 months _____60
more than 24 months _____61

13. Please indicate below the number of children you have who use the child care services provided by your employer.

less than 1 year old _____62
1 to less than 2 years old _____63
2 to less than 5 years old _____64
5-6 years old _____65
older than 6 years _____66

14. Does the availability of this child care service influence your decision to continue your present employment?

Yes _____67
No _____68

15. Did the availability of this child care service enable you to shorten your maternity leave?

Yes _____69
No _____70
Not Applicable _____71

Please complete the questions on the back of this page before returning your questionnaire.

Thank you.

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Part 2: The Child Care Service Provided by Your Employer (continued)

16. Have you ever recommended your employer to others because of the availability of the child care services?

Yes ______10
No ______11

17. Has this child care service made it possible for you to work overtime or odd hour shifts?

Yes ______12
No ______13
Not Applicable ______14

18. Has this child care service made it possible for you to accept a promotion or new position?

Yes ______15
No ______16
Not Applicable ______17

19. The child care services available through my employer have:

little or no effect on the way I do my job ______18
a somewhat positive effect on the way I do my job ______19
a very positive effect on the way I do my job. ______20

Part 3: Yourself

20. Are you: male ______21
female ______22

21. How old are you? ______23-24

22. How far did you go in school?

8th grade or less ______25
Some high school ______26
High school graduate ______27
2 years after high school ______28
4 years of college ______29
Graduate or Professional study ______30

23. Check the reason which most closely describes your reason for working.

I am the main support for my family. ______31
My family needs more than one income. ______32
It is important for me to work even though my income is not essential. ______33

Part 4: Your Work

24. What is your job title?

______________________________34-35

25. How long have you worked for this company?

______________________________36-37

Part 4: Your Work (continued)

26. How many hours per week do you usually work?

Under 30 ______38
30-40 ______39
Over 40 ______40

27. Do you receive additional pay for overtime hours?

Yes ______41
No ______42

28. What is your income before deductions? (Use whichever column is easiest)

ANNUALLY		WEEKLY	
Under $10,000	______	Under $200	______43
$10,000 - 18,000	______	$200 - 350	______44
$18,001 - 26,000	______	$351 - 500	______45
$26,001 - 35,000	______	$501 - 700	______46
Over $35,000	______	Over $700	______47

29. What is your household's income before deductions? (Use whichever column is easiest)

ANNUALLY		WEEKLY	
Under $10,000	______	Under $200	______48
$10,000 - 18,000	______	$200 - 350	______49
$18,001 - 26,000	______	$351 - 500	______50
$26,001 - 35,000	______	$501 - 700	______51
Over $35,000	______	Over $700	______52

30. How long does it take you to go to work?

Under 1/2 hour ______53
1/2 hour to 1 hour ______54
Over 1 hour ______55

31. Which of the following do you usually use to go to work?

public transportation ______56
company transportation ______57
car pool ______58
family car ______59
walk/bicycle ______60

32. Do you usually work:

Days ______61
Evenings ______62
Midnight Shift ______63
Rotate among shifts ______64

33. In the last 4 weeks, how many days have you missed work? ______65-66
(days)

Is this about usual ______67
More than usual ______68
Less than usual ______69

34. In the last 4 weeks, how many times have you been late for work? ______70-71
(times)

Is this about usual ______72
More than usual ______73
Less than usual ______74

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EMPLOYEE QUESTIONNAIRE

BEST COPY AVAILABLE

Thank you very much for spending the time to fill in this questionnaire. These answers will provide valuable information on day care arrangements used by working parents. Your individual answers will remain confidential.

Part 1: Your Family and Household

1. Number of adults (persons 18 and older) in your household. ____10-11

2. Check the statement below which most nearly describes your family structure.

single parent living alone with child(ren) ____12
single parent living alone with child(ren) and other adult(s) ____13
married parent living with spouse and child(ren) ____14
married parent living with spouse, child(ren), and other adult(s) ____15
other: (specify) ________
________ ____16

3. Please indicate below the number of children you have in each age group:

less than 1 year old ____17
1 to less than 2 years old ____18
2 to less than 5 years old ____19
5-6 years old ____20
7-13 years old ____21
14-18 years old ____22

4. How many children do you have who are regularly cared for by a friend or relative while you work? ____23
Please give their ages. ____24 ____27
____25 ____28
____26 ____29

5. How many children do you have who are regularly cared for in a day care home while you work? ____30
Please give their ages. ____31 ____34
____32 ____35
____33 ____36

6. How many children do you have who are regularly cared for in a child care program while you work? ____37
Please give their ages. ____38 ____41
____39 ____42
____40 ____43

7. The child care I use is (check all that apply)

in my home ____44
in my neighborhood ____45
on my way to work ____46
out of the way to home or work ____47
at my work site ____48

8. All of my out of home child care is:

in the same place ____49
in several places near each other ____50
in several places far from each other ____51

Part 2: The Child Care Service Provided by Your Employer

Your employer provides support for an information and referral system to assist employees in obtaining child care while they work. The questions in Part 2 relate to this service.

9. Were you informed of the availability of this child care service when you first began your employment here?

Yes ____52
No, not informed ____53
No, service not available when first employed ____54

10. If yes, did the availability of this service influence your decision to accept this employment?

Yes ____55
No ____56

11. Have you used this service?

Yes ____57
No ____58

12. If yes, have you used this service:

less than 12 months ____59
within the last 12-24 months ____60
more than 24 months ago ____61

13. Please indicate below the number of children you have for whom you have used the child care services provided by your employer.

less than 1 year old ____62
1 to less than 2 years old ____63
2 to less than 5 years old ____64
5-6 years old ____65
older than 6 years ____66

14. Does the availability of this child care service influence your decision to continue your present employment?

Yes ____67
No ____68

15. Did the availability of this child care service enable you to shorten your maternity leave?

Yes ____69
No ____70
Not Applicable ____71

Please complete the questions on the back of this page before returning your questionnaire.

Thank you.

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Part 2: The Child Care Service Provided by Your Employer (continued)

16. Have you ever recommended your employer to others because of the availability of the child care services?

Yes ______10
No ______11

17. Has this child care service made it possible for you to work overtime or odd hour shifts?

Yes ______12
No ______13
Not Applicable ______14

18. Has this child care service made it possible for you to accept a promotion or new position?

Yes ______15
No ______16
Not Applicable ______17

19. The child care services available through my employer have:

little or no effect on the way I do my job ______18
a somewhat positive effect on the way I do my job ______19
a very positive effect on the way I do my job. ______20

Part 3: Yourself

20. Are you: male ______21
female ______22

21. How old are you? ______23-24

22. How far did you go in school?

8th grade or less ______25
Some high school ______26
High school graduate ______27
2 years after high school ______28
4 years of college ______29
Graduate or Professional study ______30

23. Check the reason which most closely describes your reason for working.

I am the main support for my family. ______31
My family needs more than one income. ______32
It is important for me to work even though my income is not essential. ______33

Part 4: Your Work

24. What is your job title?

________________________________34-35

25. How long have you worked for this company?

________________________________36-37

Part 4: Your Work (continued)

26. How many hours per week do you usually work?

Under 30 ______38
30-40 ______39
Over 40 ______40

27. Do you receive additional pay for overtime hours?

Yes ______41
No ______42

28. What is your income before deductions? (Use whichever column is easiest)

ANNUALLY		WEEKLY	
Under $10,000	______	Under $200	______43
$10,000 - 18,000	______	$200 - 350	______44
$18,001 - 26,000	______	$351 - 500	______45
$26,001 - 35,000	______	$501 - 700	______46
Over $35,000	______	Over $700	______47

29. What is your household's income before deductions? (Use whichever column is easiest)

ANNUALLY		WEEKLY	
Under $10,000	______	Under $200	______48
$10,000 - 18,000	______	$200 - 350	______49
$18,001 - 26,000	______	$351 - 500	______50
$26,001 - 35,000	______	$501 - 700	______51
Over $35,000	______	Over $700	______52

30. How long does it take you to go to work?

Under 1/2 hour ______53
1/2 hour to 1 hour ______54
Over 1 hour ______55

31. Which of the following do you usually use to go to work?

public transportation ______56
company transportation ______57
car pool ______58
family car ______59
walk/bicycle ______60

32. Do you usually work:

Days ______61
Evenings ______62
Midnight Shift ______63
Rotate among shifts ______64

33. In the last 4 weeks, how many days have you missed work? ______65-66
(days)

Is this about usual ______67
More than usual ______68
Less than usual ______69

34. In the last 4 weeks, how many times have you been late for work? ______70-71
(times)

Is this about usual ______72
More than usual ______73
Less than usual ______74

__/__ __/__ __/__ __ __ __/

Is there anything else you'd like to add?

Thank you very much for spending the time to fill in this questionnaire. These answers will provide valuable information on day care arrangements used by working parents. Your individual answers will remain confidential.

Study of Employer Sponsored Child Care Services

79 W. Monroe, Suite 812
Chicago, Illinois 60603
312-236-3786 or 236-4347

APPENDIX D

INITIAL LETTER TO EMPLOYERS

February 7, 1983

Mr. James V. Wyllie
Chief Executive Officer
Nyloncraft
218 West McKinley Highway
Mishawaka, Indiana 46544

Dear Mr. Wyllie:

The United States Department of Health and Human Services has awarded a grant to the Foundation for Human Service Studies, Incorporated and CSR, Incorporated to study the effects of employer sponsored child care. This government study will analyze if and how employee's absenteeism, length of employment, and attitudes are affected when a company provides a form of child care service. Information for the study will be obtained from two sources: first from the companies themselves and second from the employees utilizing the services.

Since your corporation currently is involved in providing a form of child care service to your employees, we are interested in pursuing the possibility of your company participating in this federally-sponsored study. Pursuant to this, either Ann Gilman Dawson or Cynthia Mikel will contact you in about a week to further describe the study and your corporation's potential role in it.

We realize that some firms do not want their services publicized and want to assure you that anonymous participation in this study is acceptable.

We look forward to a continuing relationship with you.

Very truly yours,

Irving Lazar

Irving Lazar
President, Foundation for
Human Service Studies, Inc.

Ann Gilman Dawson
Director of Chicago Office
CSR, Incorporated

Foundation for Human Service Studies, Inc.

CSR, Incorporated

Study funded by a grant from the Department of Health and Human Services

Study of Employer Sponsored Child Care Services

79 W. Monroe, Suite 812
Chicago, Illinois 60603
312-236-3786 or 236-4347

APPENDIX E

STUDY LETTER TO EMPLOYEES

Dear Working Parent,

Your employer is one of the few in the country that is providing a form of child care service for its employees. Gathering information on how this service affects you will be helpful in encouraging other employers to provide a child care service for their employees. You, of course, know how important good child care is to a working parent.

The U.S. Department of Health and Human Services has funded us to find out how an employee's absenteeism and job stability are affected if the employer provides a form of child care service. In order to determine this we are having some employees who have used the child care service complete a questionnaire and then we will review the attendance records of each of these people.

You have been chosen at random to participate.

All information collected is confidential and will be used only for research. Your name and address will not be linked to any information. No information that identifies any individual will be released. Your participation is voluntary.

We're asking you to take a few minutes to complete the enclosed questionnaire and consent form. Please do it today. Place the questionnaire in the white envelope and seal. Place the consent form in the blue envelope and seal. Return each to the person from your company whose name appears on the envelopes. We are depending on you for our study.

We want to thank you for completing the questionnaire and for taking the time to help us with our study. All of your answers will be kept confidential from your employer and will have absolutely no effect on your continued employment.

Thank you very much for your help.

Very truly yours,

Irving Lazar

Irving Lazar
President, Foundation for
Human Service Studies, Inc.

P.S. Please take the time to participate in our study. Your efforts can help encourage other employers to provide a child care service for their employees.

Study funded by a grant from the Department of Health and Human Services

APPENDIX F

SAMPLE EMPLOYER LETTER TO EMPLOYEES

Globe-Weis

Dear Employee,

Globe-Weis is pleased to be participating in a study being conducted by the U.S. Department of Health and Human Services. The government recognizes the changing needs of families and especially wants to find out how employee's child care arrangements affect their attendance at work. In order to determine this, information will be gathered from about thirty companies which sponsor child care services for their employees.

You are being asked to be one of the employees from our company included in the study. If you agree to participate you are being asked to complete and return the enclosed questionnaire. Your name will be replaced by a number and will not appear in any connection with the information from your questionnaire. All information will be confidential and your anonymity assured. Please return the questionnaire no later than May 27th to me.

I hope that you will participate in the study as it should provide valuable information for future provision of child care services to employees. The choice, however, is entirely your own. Your decision will in no way affect your employment at Globe-Weis.

When the study is completed we will receive a copy of the results. If you are interested in reading them please let me know.

Sincerely,

Chris Zackowski

Chris Zackowski

GLOBE-WEIS/The Office Products Group of Sheller-Globe Corporation
Red Rope home/office products Smokador office furnishings
Wood Avenue, P.O. Box 11, Bristol, Pennsylvania 19007
PA (215) 785-1531 NY (212) 855-8001
Wats (except Pennsylvania) 800-523-5989

79 W. Monroe, Suite 812
Chicago, Illinois 60603
312-236-3786 or 236-4347

APPENDIX G

EMPLOYEE CONSENT FORM

I understand that the U.S. Department of Health and Human Services wishes to collect information on different kinds of child care services available to working parents. I understand that this research is being done to determine how various forms of company-sponsored child care services affect employees.

The government recognizes the changing needs of families and especially wants to find out how employee's child care arrangements affect their attendance at work. In order to determine this, information will be gathered from about thirty companies which sponsor child care services for their employees.

I agree to take part in this study. I understand that all information will be used solely in connection with the study. I understand that I will in no way be identified as having participated in this study in the final report and that all data will be presented only in the aggregate.

I understand that the Federal Reserve Bank of Boston has been informed that this study is being conducted and is pleased to participate in conjunction with the Child Care Resource Center provided employees who are asked to take part in the survey are informed that the decision to do so is completely voluntary.

(Print) Name of Respondent ______________________________

Signature of Respondent ______________________________

After you have signed this form, put it in the matching blue envelope, seal and return to the person whose name is on the envelope. This form will authorize your company to release your attendance record over the past year with the understanding that the information will be used for the purpose of this study only.

APPENDIX H

ATTENDANCE DATA FORM

ABSENTEEISM DATA SHEET

Person completing form ______________________ Date completed __________

Employee # _/_ _/_ _/_ _ _ _/ First day of study year _/_/82 Last Day of study year _/_/83 Sheet # __ of __

PAY PERIOD DATES	# DAYS WORKED	# DAYS PAID	# DAYS SCHEDULED TO WORK	# PAID DAYS ABSENT	# UNPAID DAYS ABSENT	Dates of Absenteeism	PLANNED	NONPLANNED	VACATION	HOLIDAY	PERSONAL DAY	SICK	FAMILY SICKNESS	ACCIDENT IN PLANT	ACCIDENT OUT OF PLANT	DISCIPLINE	LAID OFF	LEAVE OF ABSENCE	UNKNOWN	OTHER	OTHER

APPENDIX J

ATTENDANCE DATA SUMMARY SHEET

Company ______________________ Study Year __/__/__ to __/__/

Employee Number __/__ __/__ __/ __ __ __ __/

Exempt ____ Non Exempt ____ (21)

Job Title ______________________

		_____	(22-23)
Maximum possible paid days		_____	
Less extended leave of absence		_____	(24-26)
Less scheduled paid days off			
Holidays		_____	(27-28)
Vacation/Floating Holidays/ Personal Days		_____	(29-30)
Other: Jury duty, military leave, etc.		_____	(31-32)
		_____	
		_____	
Total scheduled paid days off		(_____)	(33-35)
Total days scheduled to work		_____	(36-38)
Sick	___		
Family Sick	___		
Death	___		
Total non-scheduled paid days off		(_____)	(39-40)
Total		_____	
Less unpaid days off			
Sick	___		
Family Sick	___		
Death	___		
Unexcused	___		
Total unpaid days off		(_____)	(41-42)
Total unscheduled days off		_____	(43-44)
Total days worked		_____	(45-47)
Total days paid		_____	(48-50)

APPENDIX K

SELECTED EMPLOYEE COMMENTS

- The child day care program at my company is a big plus for the corporation and its employees. It is such a relief to be able to go to work knowing my child is right on the grounds if she needs me, just footsteps away. And I enjoy that she's learning and working in a structured environment all day. That is what makes me regret that I have to take her out of the day care this summer for financial reasons. It would be nice if the company could pick up more than 10%; maybe a schedule based on salaries.

  On-site
  Single parent living alone with children
  Salary $10,000 - 18,000

- Having a day care program on the worksite has lifted a lot of worry that I use to go through, wondering what they were doing -- with this worry lifted I believe I can handle my job and the stress and pressures with it much better, so when I go for the day I feel fresh and secure my daughter has had a good day, the same as me. Also I am able to see her each day at lunch -- and we share our morning progress. These special moments sure change your daily outlook if things are going bad. Again that reassurance she is safe.

  On-site
  Single parent living alone with child
  Salary: $10,000 - 18,000

- My child was 5 months old before the child development center was open. After our son had been at the center at my place of employment for about a month my husband commented on the fact that my attitude about working was a lot better.

  On-site
  Married parent living with spouse and child
  Salary: $18,001 - 26,000
  Family Income: over $35,000

- At one time I considered accepting a position outside of the hospital, but because of the child development center I withdrew my application.

  Being able to spend time with my child during working hours made it easier to adjust to working after maternity leave. I don't worry about him as much and am able to concentrate on my job much better. I'm sure it has reflected in my attendance record and certainly contributes to my attitude towards my job.

  On-site
  Married parent living with spouse and children
  Salary: $10,000 - 18,000
  Family Income: $18,001 - 26,000

- I would not have stayed as long as I have at this job were it not for the day care-kindergarten program. My peace of mind about my child's care does make me a better employee.

  On-site
  Married parent living with spouse and child
  Salary: under $10,000
  Family Income: $26,001 - 35,000

- It meant a great deal to me to be able to continue breast feeding my baby until she weaned herself. I am often able to visit with her during the day, as my schedule permits. Knowing I am right there should she become sick or injured is a great relief. I'm sure our center has eliminated much stress many working mothers must feel. Such stresses are very counter productive for an employer.

  On-site
  Married parent living with spouse and child
  Salary: $18,000 - 26,000
  Family Income: over $35,000

- At the time of hire I had no interest in the child care program...now that's why I'm staying.

  Child care is only open day shift and not on weekends. I can only work days M-F.

  I have missed a lot more days of work due to my children's illness or conditions not allowed in day care.

  On-site
  Married parent living with spouse and children

- For an employer to offer child care services, especially as part of an employee's benefit package, to it's employees says alot about the employer! (alot of positive things). I greatly admire my employer for setting up this service for it's employees.

  Off-site
  Married parent living with spouse and child
  Salary: $10,000 - 18,000
  Family Income: $26,001 - 35,000

- My second child has attended my employer sponsored day care center since the day it opened its doors (6 yrs.). With my first child I lived through working full time and constantly having to deal with "sitters" whose own lives and complications made a very inconsistent environment for myself, my family and most of all my child.

  Once the day care center opened I was able to depend on:

  1. someone would be there to care for my child.
  2. the care would be consistent day to day.

  My whole life changed -- I was no longer worried or harrassed. I really feel that one can be a better worker if the worry about child care is relieved.

  Off-site
  Married parent living with spouse and children
  Salary: $18,000 - 26,000
  Family Income: over $35,000

- It would be very nice if the center would expand its hours to include the p.m. shift, as there are many employees who find it hard to find reliable people to watch their children on the p.m. shift.

  Off-site
  Married parent living with spouse and child
  Salary: $10,000 - 18,000
  Family Income: same

- If not for the day care center at my work, I would be seriously considering alternate employment. The day care is one of the main reasons for my continued stay.

  On-site
  Married parent living with spouse and children
  Salary: $18,001 - 26,000
  Family Income: $26,001 - 35,000

- I think subsidized day care is very important for parents and demonstrates a corporations "human side". Critical to attracting and keeping the best people in the marketplace.

  Off-site
  Married parent living with spouse, child and other adult
  Salary: $26,001 - 35,000
  Family Income: over $35,000

- The services provided didn't help me at all. I still had to do all the research myself. They didn't have the day care center I chose listed. The days I miss of work are 99% caused by my child being ill. This company should provide subsidieded (sic) day care on-site. Now that would help!

  I & R
  Single parent living alone with child and other adults
  Self $10,000 - 18,000
  Household - same

- I feel the availability of a list of daycare people is helpful, but other alternatives (newspaper, word of mouth, etc.) are viable. To truely affect your work attendance, attitude, etc. actual daycare centers at work are really the only way.

  I & R
  Married parent living with spouse and children
  Salary: $26,001 - 35,000
  Family Income: over $35,000

- I really appreciate my employer offering this service, it really helps for first time mothers like myself who really don't know where to begin in looking for child care.

  I & R
  Married parent living with spouse and child
  Salary: $10,000 - 18,000
  Family Income: $26,001 - 35,000

- I think it is important to note that you always need back-up arrangements made for child care when your child is ill and can't go to the center and for the days the center is closed. You can't depend 100% on the center particularly when I'm required to work when the center is closed, i.e. 5-11 p.m. and 11 p.m. - 7 a.m.

  I can't tell you how convenient it is to have your child so close. Particularly with children with chronic problems such as asthma. These children could be fine in the AM and in real distress in a matter of hours, yet you could be with them in a matter of a few minutes.

  The day care had nothing to do with my accepting employment here, and may affect my job a little in that I'm happy with an institution that provides this for me. But I can tell you I'd sure think a long time before leaving - because of the day care.

  On-site
  Married parent living with spouse and children
  Salary: $18,001 - 26,000
  Family Income: over $35,000

- Quality day care services is first and foremost in the minds of working moms and dads. The early development of our children is first and foremost in our minds. We are all very appreciative, or should be, that our company has recognized this crucial benefit and has assisted us in our search for day care. I believe quality is the key which covers every category from changing a diaper to recognizing a problem with a child and informing the parent(s). Thank you.

P.S. Every company should get on the band wagon and assist their employees especially single parents. Remembering always these children are the adults of tomorrow. A very old cliche but O so real.

Off-site
Married parent living with spouse and child
Salary: $18,001 - 26,000
Family Income: over $35,000

- The Child Care Referral and Information Service is minimal. For an employee of our size, offering child care services here or close by seems more appropriate and would be much more helpful. It would also have a positive effect on my job performance.

I & R
Married parent living with spouse and child
Salary: $10,000 - 18,000
Family Income: $18,001 - 26,000

- Having a day care center right in the same building has been a tremendous benefit. It helps take the guilt away from working.

The day care center here is a top notch day care center and I feel very fortunate to have it here as a benefit. What more of a benefit could you want.

On-site
Married parent living with spouse and child
Salary: $10,000 - 18,000
Family Income: $26,001 - 35,000

- The availability of day care at my work site was extremely influencial in my accepting employment with my employer, and in my continuing employment. I even accepted a salary lower than I would have accepted from an employer without day care facilities. I also feel it has had a very positive affect on my attendance.

  On-site
  Married parent living with spouse and child
  Salary: $10,000 - 18,000
  Family Income: $18,001 - 26,000

- I recently changed jobs within the hospital, from a staff nurse to an instructor. It's considered a promotion. While the availability of the child care did not affect my promotion, it made staying at this institution rather than applying elsewhere very desirable.

  Off-site
  Married parent living with spouse and child
  Salary not indicated
  Family Income: $26,001 - 35,000

- Without our day care center, we would not have been able to have a baby because of the lack of early infant day care. It also enables mothers to nurse and continue to work.

  On-site
  Married parent living with spouse and children
  Salary: $18,001 - 26,000
  Family Income: over $35,000

- In relation to absenteeism, I feel that I must stay home when my child is ill. As there is no one else to care for my child, this is often the reason for my missing work. The day care center, quite understandbly, cannot allow a sick child to attend.

  On-site
  Single parent living alone with child and other adult
  Salary: under $10,000
  Family Income: $18,001 - 26,000

- I feel that the Day Care Center is the most important employee benefit I receive from my company.

  I wish all employers provided similar day care facilities for their employees!

  On-site
  Married parent living with spouse and child
  Salary: $26,001 - 35,000
  Family Income: over $35,000

- My employer was very helpful in supplying me with many names for babysitters, but most of the names listed as the "good" babysitters, were filled and did not accept new babies. I was successful in finding a babysitter through our church.

  I & R
  Married parent living with spouse and child
  Salary: $18,001 - 26,000
  Family Income: over $35,000

- I would not be working if my child was not provided child care - he has experienced so many things since he was 18 months old. He considers the children at the center as "his kids" - they are a second family for him.

  Our employer provides excellent fringe benefits in rates for all employees. I could not provide care for him anywhere for the amount I pay daily.

  Off-site
  Married parent living with spouse and children
  Salary: $10,000 - 18,000
  Family Income: $18,001 - 26,000

- The availability of the day care center directly affected my return to programming. I was previously in another department on the night shift. I did not want my child in a center far from my office.

  On-site
  Married parent living with spouse and child
  Salary: $18,001 - 26,000
  Family Income: $26,001 - 35,000

- My employer has now offered a pre-tax deduction of child care payments so I have more spendable income. I'm not sure I could afford care anywhere else.

  Thank you for looking into a very important issue.

  Off-site
  Married parent living with spouse and children
  Salary: $26,001 - 35,000
  Family Income: over $35,000

- In situations like a hospital where most employees are women and staff works 24 hrs. a day - it would be beneficial to have day care on the premises 24 hrs. around the clock, plus daycare could be an attraction to employment if it were more economic. * Its about time this has become an issue worth looking into, women could be much more efficient and positive if reasonable consideration is given to their life and work.

  Off-site
  Single parent living alone with child
  Salary: $18,001 - 26,000

- I believe the Child Care Center at my work to be one of the best benefits any employer could offer. I am proud that the administration had the insight to approve such a venture.

  One area not really addressed in this questionnaire was the quality of care the children are receiving at the center. The learning opportunities and advantages given these children are superior to other home care or day care centers. I believe that parents have peace of mind, not only because of the center being in the institution; but also because the care is excellent.

  My only regret is that due to the long waiting list, our next child may not be able to be enrolled.

  On-site
  Married parent living with spouse and child
  Salary: $18,001 - 26,000
  Family Income: over $35,000

APPENDIX L

ADDRESSES OF EMPLOYERS

* Employers not included are those requesting anonymity.

Mr. William R. Brown
Personnel Director
Allstate Insurance Company
Allstate Plaza
Northbrook, IL 60062

Ms. Lyla Haggard
Assistant Vice President
Corporate Communications
Bethesda Hospital, Inc.
619 Oak Street
Cincinnati, OH 45206

Mr. Larry Taylor
Carlson Craft
P.O. Box 8700
1750 Tower Boulevard
North Mankato, MN 56002-8700

Ms. Lillian Kezerian
Assistant Director of
Employee Relations &
Communications
CIGNA Corporation
Department A-11
Hartford, CT 06152

Ms. Theresa diLorenzo
Vice President
Empire Airlines
Day Care Center
Oneida County Airport
Utica-Rome, NY 13424

Mr. Arthur R. LaPoint
Director, Human Resources
Fairview Hospital
2312 South Sixth Street
Minneapolis, MN 55454

Ms. Joanne D. Wall
Senior Vice President,
Operations
Family Hospital
2711 West Wells
Milwaukee, WI 53208

Mr. Dan L. Craft
Vice President
Director of Personnel
1st Source Corporation
P.O. Box 1602
South Bend, IN 46634

Ms. Chris Zackowski
Director - Learning Center
Globe Weis/Division of Sheller
Globe Corporation
7 Wood Avenue
Bristol, PA 19007

Mr. Thomas L. Uridge
Associate Vice President
Human Resources
Ingham Medical Center
401 West Greenlawn Avenue
Lansing, MI 48909

Ms. Jackie Kasnetz
Benefits Manager
The Jewish Hospital of
St. Louis at Washington
University Medical Center
216 South Kingshighway Blvd.
St. Louis, MO 63178

Ms. Ruth Browning
Compensation Analyst
Lake Forest Hospital
660 N. Westmoreland Road
Lake Forest, IL 60045

Mr. Richard Green
Vice President, Human Resources
Luther Hospital, Inc.
1221 Whipple Street
Eau Claire, WI 54702-4105

Ms. Diane C. Lavine
Director of Personnel
Lutheran General Hospital
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Park Ridge, IL 60068

Mrs. Barbara Kiracofe
Vice President
The Lutheran Hospital of
Fort Wayne, Inc.
3024 Fairfield Avenue
Fort Wayne, IN 46807

Ms. Kathleen K. Peterson
Vice President - Human Resources
Mt. Sinai Hospital
2215 Park Avenue South
Minneapolis, MN 55404

Mr. B. W. Pitzer
Manager-Personnel Resources
NCR Corporation
Engineering & Manufacturing-
Ithaca
950 Danby Road
Ithaca, NY 14850

Mr. Don Janckila
Employee Relation/Affirmative
Action
Northwestern Bell Telephone Co.
200 South 5th Street
Minneapolis, MN 55402

Mr. James Wyllie
President
Nyloncraft, Inc.
234 Schumacher Drive
Mishawaka, IN 46544

Mr. Jack Lietz
General Manager
Petersen Health Care of
Wisconsin, Inc.
Boyce Drive
Rhinelander, WI 54501

Mr. Ben Katcoff
Corporate Benefits Manager
Polaroid Corporation
750 Main Street
Cambridge, MA 02139

Mr. Charles R. Wicktor
Director, Personnel
Saint Mary's Health Center
6420 Clayton Road
St. Louis, MO 63117

Mr. Edmond F. Anzalone
Personnel Director
Union Fidelity Life Insurance Co.
Union Fidelity Office Park
Trevose, PA 19049